

CONTACTOR, AC-3 30 KW/400 V, AC 230 V, 50 HZ, 3-POLE, SIZE S3, SCREW CONNECTION



Figure similar

product brand name	SIRIUS
Product designation	power contactor

**General technical data:**

Size of contactor	S3
Insulation voltage	
• Rated value	1 000 V
Surge voltage resistance Rated value	6 kV
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Degree of pollution	3
Mechanical service life (switching cycles)	
• of the contactor typical	10 000 000
• of the contactor with added electronics-compatible auxiliary switch block typical	5 000 000
• of the contactor with added auxiliary switch block typical	10 000 000

**Ambient conditions:**

<b>Installation altitude at height above sea level maximum</b>	2 000 m
<b>Ambient temperature</b>	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C
<b>Main circuit:</b>	
<b>Number of NO contacts for main contacts</b>	3
<b>Number of NC contacts for main contacts</b>	0
<b>Operating current</b>	
• at AC-1 at 400 V	
— at ambient temperature 40 °C Rated value	100 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C Rated value	100 A
— at ambient temperature 60 °C Rated value	90 A
• at AC-3	
— at 400 V Rated value	65 A
— at 690 V Rated value	47 A
<b>Connectable conductor cross-section in main circuit at AC-1</b>	
• at 60 °C minimum permissible	35 mm <sup>2</sup>
• at 40 °C minimum permissible	35 mm <sup>2</sup>
<b>Operating current for ≥ 200000 operating cycles at AC-4</b>	
• at 400 V Rated value	28 A
• at 690 V Rated value	20 A
<b>Operating current</b>	
• at 1 current path at DC-1	
— at 24 V Rated value	90 A
— at 110 V Rated value	4.5 A
• with 2 current paths in series at DC-1	
— at 24 V Rated value	90 A
— at 110 V Rated value	90 A
• with 3 current paths in series at DC-1	
— at 24 V Rated value	90 A
— at 110 V Rated value	90 A
<b>Operating current</b>	
• at 1 current path at DC-3 at DC-5	
— at 24 V Rated value	40 A
— at 110 V Rated value	2.5 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	90 A
— at 24 V Rated value	90 A

<ul style="list-style-type: none"> <li>• with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V Rated value</li> <li>— at 24 V Rated value</li> </ul> </li> </ul>	<p>90 A</p> <p>90 A</p>
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 230 V at 60 °C Rated value</li> <li>— at 400 V Rated value</li> <li>— at 690 V Rated value</li> <li>— at 690 V at 60 °C Rated value</li> </ul> </li> <li>• at AC-2 at 400 V Rated value</li> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 V Rated value</li> <li>— at 400 V Rated value</li> <li>— at 500 V Rated value</li> <li>— at 690 V Rated value</li> </ul> </li> </ul>	<p>34 kW</p> <p>59 kW</p> <p>102 kW</p> <p>102 kW</p> <p>30 kW</p> <p>18.5 kW</p> <p>30 kW</p> <p>37 kW</p> <p>45 kW</p>
<b>Operating power for ≥ 200000 operating cycles at AC-4</b>	
<ul style="list-style-type: none"> <li>• at 400 V Rated value</li> <li>• at 690 V Rated value</li> </ul>	<p>15.1 kW</p> <p>18.6 kW</p>
<b>Thermal short-time current limited to 10 s</b>	600 A
<b>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</b>	4.6 W
<b>No-load switching frequency</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	5 000 1/h
<b>Operating frequency</b>	
<ul style="list-style-type: none"> <li>• at AC-1 maximum</li> <li>• at AC-2 maximum</li> <li>• at AC-3 maximum</li> <li>• at AC-4 maximum</li> </ul>	<p>1 000 1/h</p> <p>400 1/h</p> <p>1 000 1/h</p> <p>300 1/h</p>
<b>Control circuit/ Control:</b>	
<b>Type of voltage of the control supply voltage</b>	AC
<b>Control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz Rated value</li> <li>• Rated value</li> </ul>	<p>230 V</p> <p>50 Hz</p>
<b>Operating range factor control supply voltage rated value of the magnet coil at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	0.8 ... 1.1
<b>Apparent pick-up power of the magnet coil at AC</b>	218 V·A
<b>Inductive power factor with closing power of the coil</b>	0.61
<b>Apparent holding power of the magnet coil at AC</b>	21 V·A
<b>Inductive power factor with the holding power of the coil</b>	0.26

<b>Closing delay</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	16 ... 57 ms
<b>Arcing time</b>	10 ... 15 ms

#### Auxiliary circuit:

<b>Number of NC contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul>	0
<b>Number of NO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul>	0
<b>Operating current at AC-12 maximum</b>	10 A
<b>Operating current at AC-15</b>	
<ul style="list-style-type: none"> <li>• at 230 V Rated value</li> <li>• at 400 V Rated value</li> </ul>	6 A 3 A
<b>Operating current at DC-12</b>	
<ul style="list-style-type: none"> <li>• at 60 V Rated value</li> <li>• at 110 V Rated value</li> <li>• at 220 V Rated value</li> </ul>	6 A 3 A 1 A
<b>Operating current at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V Rated value</li> <li>• at 60 V Rated value</li> <li>• at 110 V Rated value</li> <li>• at 220 V Rated value</li> </ul>	10 A 2 A 1 A 0.3 A
<b>Contact reliability of the auxiliary contacts</b>	1 faulty switching per 100 million (17 V, 1 mA)

#### UL/CSA ratings:

<b>Contact rating of the auxiliary contacts acc. to UL</b>	A600 / Q600
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#### Short-circuit:

<b>Design of the fuse link</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of assignment 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 250 A fuse gL/gG: 125 A fuse gL/gG: 10 A

#### Installation/ mounting/ dimensions:

<b>Mounting type</b>	screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail
<ul style="list-style-type: none"> <li>• Side-by-side mounting</li> </ul>	Yes
<b>Height</b>	146 mm
<b>Width</b>	70 mm
<b>Depth</b>	139 mm
<b>Required spacing</b>	

- for grounded parts  
— at the side

6 mm

### Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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[Baumusterbescheinigung](#)



Test Certificates	Shipping Approval
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### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

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

**Industry Mall (Online ordering system)**

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

**Cax online generator**

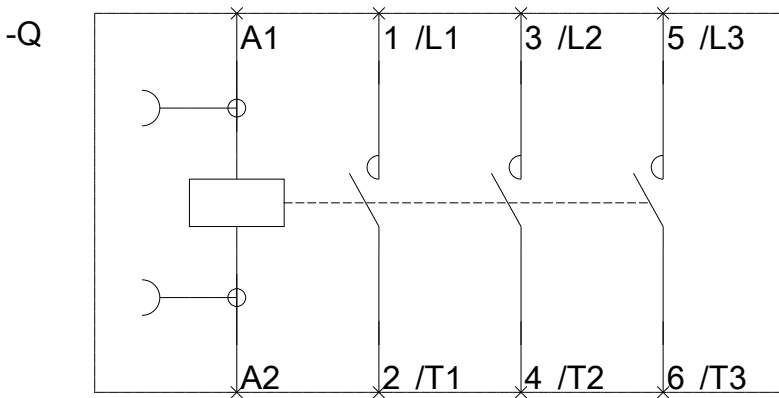
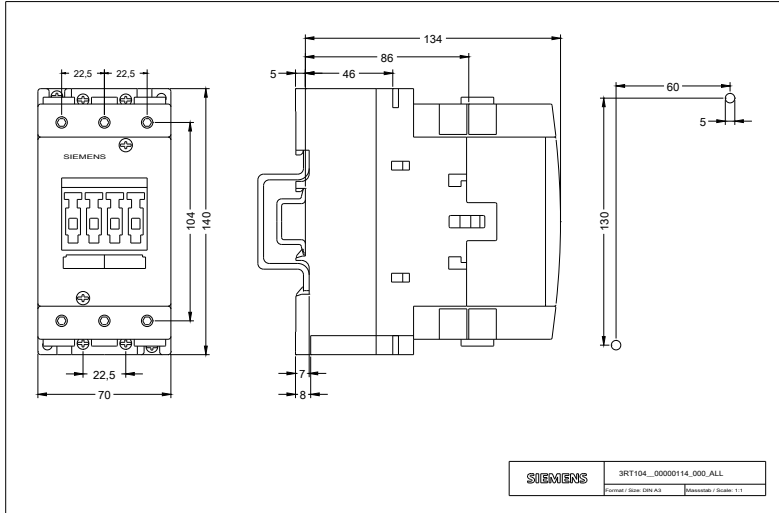
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10441AP00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10441AP00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT10441AP00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10441AP00&lang=en)



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