



CONTACTOR, AC-3 37 KW/400 V, AC 24 V, 50 HZ, 3-POLE, SIZE S3, SCREW CONNECTION

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:

<b>Insulation voltage</b>	
• Rated value	1 000 V
<b>Degree of pollution</b>	3
<b>Surge voltage resistance Rated value</b>	6 kV
<b>Mechanical service life (switching cycles)</b>	
• 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
<b>Thermal short-time current restricted to 10 s</b>	760 A
<b>Protection class IP</b>	
• on the front	IP00
• of the terminal	IP00
<b>Equipment marking</b>	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

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 current</b>	

<ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 400 V at ambient temperature 40 °C Rated value</li> <li>— up to 690 V at ambient temperature 40 °C Rated value</li> <li>— up to 690 V at ambient temperature 60 °C Rated value</li> </ul> </li> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V Rated value</li> <li>— at 690 V Rated value</li> </ul> </li> <li>• at AC-4 at 400 V Rated value</li> </ul>	<p>120 A</p> <p>120 A</p> <p>100 A</p> <p>80 A</p> <p>58 A</p> <p>66 A</p>
<p><b>Operating current with 1 current path</b></p> <ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> </ul>	<p>100 A</p> <p>9 A</p> <p>40 A</p> <p>2.5 A</p>
<p><b>Operating current with 2 current paths in series</b></p> <ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> <li>• 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>100 A</p> <p>100 A</p> <p>100 A</p> <p>100 A</p>
<p><b>Operating current with 3 current paths in series</b></p> <ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 24 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> <li>• 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>100 A</p> <p>100 A</p> <p>100 A</p> <p>100 A</p>
<p><b>Operating power</b></p> <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 690 V at 60 °C Rated value</li> </ul> </li> </ul>	<p>38 kW</p> <p>114 kW</p>
<p><b>Operating power for ≥ 200000 operating cycles at AC-4</b></p> <ul style="list-style-type: none"> <li>• at 400 V Rated value</li> <li>• at 690 V Rated value</li> </ul>	<p>17.9 kW</p> <p>21.1 kW</p>
<p><b>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</b></p>	<p>7.7 W</p>

<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>	900 1/h 400 1/h 1 000 1/h 300 1/h
<b>No-load switching frequency</b>	
<ul style="list-style-type: none"> <li>• with AC</li> </ul>	5 000 1/h

#### Control circuit/ Control:

<b>Type of voltage of the control supply voltage</b>	AC
<b>Control supply voltage with AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz Rated value</li> <li>• Rated value</li> </ul>	24 V 50 Hz
<b>Operating range factor control supply voltage rated value of the magnet coil with AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	0.8 ... 1.1

#### 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-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>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: 160 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>	
<ul style="list-style-type: none"> <li>• for grounded parts</li> <li style="padding-left: 20px;">— at the side</li> </ul>	6 mm

#### Connections/ Terminals:

<b>Type of electrical connection</b>	
<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 connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— stranded</li> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>• for AWG conductors for main contacts</li> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG conductors for auxiliary contacts</li> </ul>	<p>2x (2.5 ... 16 mm<sup>2</sup>)</p> <p>2x (10 ... 50 mm<sup>2</sup>)</p> <p>2x (2,5 ... 16 mm<sup>2</sup>)</p> <p>2x (2.5 ... 35 mm<sup>2</sup>)</p> <p>2x (10 ... 35 mm<sup>2</sup>)</p> <p>2x (10 ... 1/0)</p> <p>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>)</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>

#### Mechanical data:

<b>Size of contactor</b>	S3
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#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	2 000 m
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	<p>-25 ... +60 °C</p> <p>-55 ... +80 °C</p>

#### Certificates/ approvals:

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



Test Certificates	Shipping Approval
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[Special Test Certificate](#)



other
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[other](#)

[Environmental Confirmations](#)

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

**Industry Mall (Online ordering system)**

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

**Cax online generator**

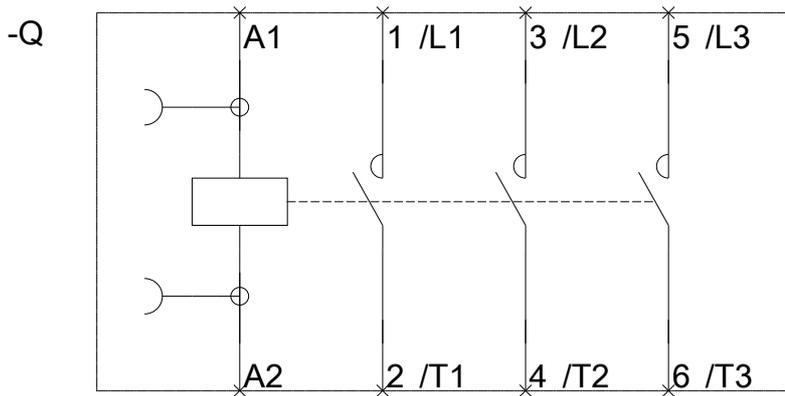
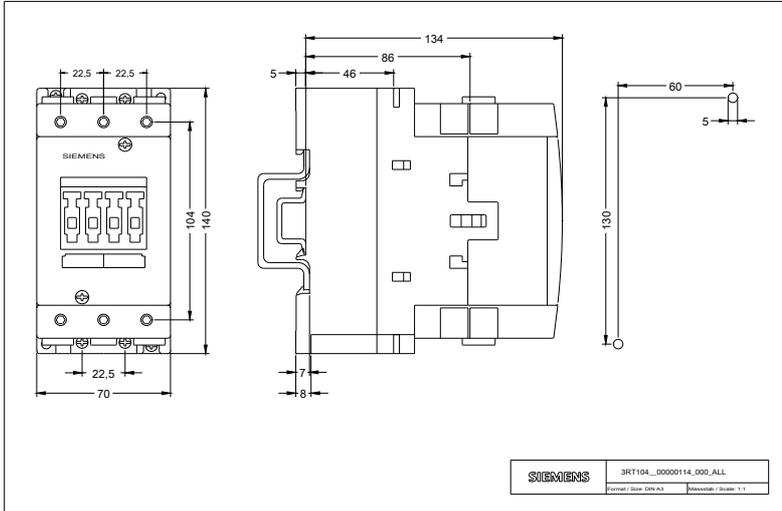
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10451AB00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10451AB00>

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

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