



CONTACTOR, 55KW/400V/AC-3 AC(40...60HZ)/DC OPERATION  
UC 220...240V AUXIL. CONTACTS 2NO+2NC 3-POLE, SIZE S6  
WITH BOX TERMINALS CONVENTIONAL OPERATING MECHAN.  
SCREW TERMINAL

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>	8 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>	1 100 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>	160 A  160 A  140 A  115 A 115 A 97 A
<b>Operating current with 1 current path</b>	
<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>	160 A 18 A  160 A 2.5 A
<b>Operating current with 2 current paths in series</b>	
<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>	160 A 160 A  160 A 160 A
<b>Operating current with 3 current paths in series</b>	
<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>	160 A 160 A  160 A 160 A
<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 690 V at 60 °C Rated value</li> </ul> </li> </ul>	53 kW 159 kW
<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>	29 kW 48 kW
<b>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</b>	7 W

<b>Operating frequency</b>	
• at AC-1 maximum	800 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	130 1/h
<b>No-load switching frequency</b>	
• with AC	2 000 1/h
• for DC	2 000 1/h

#### Control circuit/ Control:

<b>Type of voltage of the control supply voltage</b>	AC/DC
<b>Control supply voltage with AC</b>	
• at 50 Hz Rated value	220 ... 240 V
• at 60 Hz Rated value	220 ... 240 V
<b>Control supply voltage for DC</b>	
• Rated value	220 ... 240 V
• Rated value	40 Hz
<b>Control supply voltage frequency 2 Rated value</b>	60 Hz
<b>Operating range factor control supply voltage rated value of the magnet coil with AC</b>	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.8 ... 1.1
<b>Operating range factor control supply voltage rated value of the magnet coil for DC</b>	0.8 ... 1.1
<b>Design of the surge suppressor</b>	with varistor
<b>Closing power of the magnet coil for DC</b>	360 W
<b>Holding power of the magnet coil for DC</b>	5.2 W

#### Auxiliary circuit:

<b>Number of NC contacts</b>	
• for auxiliary contacts	
— instantaneous contact	2
<b>Number of NO contacts</b>	
• for auxiliary contacts	
— instantaneous contact	2
<b>Operating current at AC-15</b>	
• at 230 V Rated value	6 A
• at 400 V Rated value	3 A

#### 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>	
• for short-circuit protection of the main circuit	

- with type of assignment 1 required
- with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

fuse gL/gG: 355 A  
 fuse gL/gG: 315 A  
 fuse gL/gG: 10 A

#### Installation/ mounting/ dimensions:

<b>Mounting type</b>	screw fixing
• Side-by-side mounting	Yes
<b>Height</b>	172 mm
<b>Width</b>	120 mm
<b>Depth</b>	170 mm
<b>Required spacing</b>	
• for grounded parts	
— at the side	10 mm

#### Connections/ Terminals:

<b>Type of electrical connection</b>	
• for main current circuit	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals
<b>Type of connectable conductor cross-section</b>	
• for main contacts	
— stranded	max. 2x 70 mm <sup>2</sup>
— finely stranded with core end processing	max. 1x 50, 1x 70 mm <sup>2</sup>
— finely stranded without core end processing	max. 1x 50, 1x 70 mm <sup>2</sup>
• for AWG conductors for main contacts	2x 1/0
• for auxiliary contacts	
— solid	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> )
— finely stranded with core end processing	2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• for AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12

#### Mechanical data:

<b>Size of contactor</b>	S6
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#### 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

#### Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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CCC



CSA



UL



[Type Examination](#)



EG-Konf.

Test Certificates	Shipping Approval
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



DNV



GL



RMRS

other
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[Confirmation](#)

[Environmental Confirmations](#)

[other](#)

### 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**

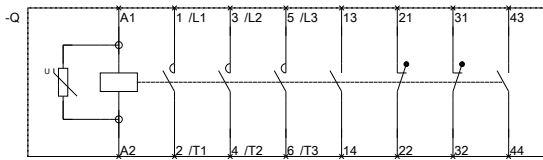
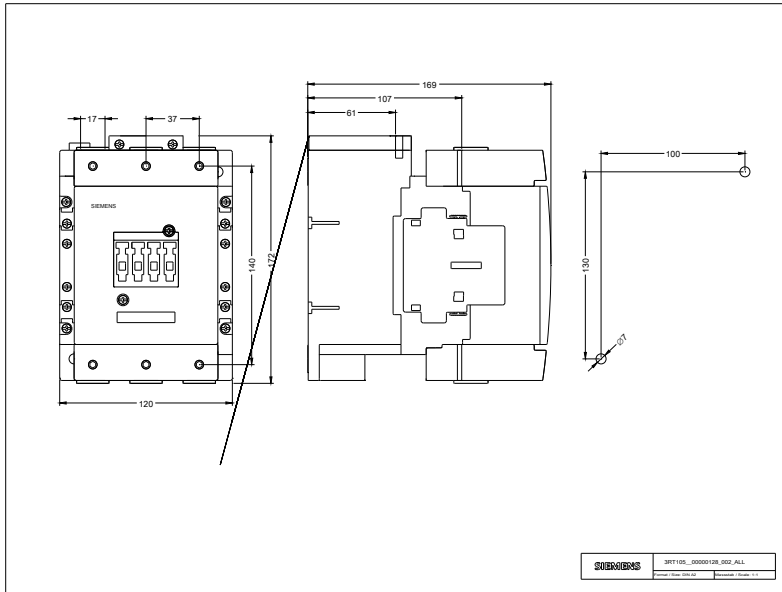
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10541AP36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10541AP36>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT10541AP36&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10541AP36&lang=en)



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3RT107--A.6.01\_4\_IEC.DXF