



CONTACTOR, 55KW/400V/AC-3 AC(40...60HZ)/DC OPERATION UC 110...127V 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:

Size of contactor	S6
Insulation voltage	
• Rated value	1 000 V
Degree of pollution	3
Surge voltage resistance Rated value	8 kV
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
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C

- during storage

-55 ... +80 °C

#### 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>Connectable conductor cross-section in main circuit at AC-1</b>	
<ul style="list-style-type: none"> <li>• at 60 °C minimum permissible</li> </ul>	50 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• at 40 °C minimum permissible</li> </ul>	70 mm <sup>2</sup>
<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 ambient temperature 40 °C Rated value</li> </ul> </li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-1 up to 690 V           <ul style="list-style-type: none"> <li>— at ambient temperature 40 °C Rated value</li> <li>— at ambient temperature 60 °C Rated value</li> </ul> </li> </ul>	160 A 140 A
<ul style="list-style-type: none"> <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> </ul>	115 A 115 A
<ul style="list-style-type: none"> <li>• at AC-4 at 400 V Rated value</li> </ul>	97 A
<b>Operating current for ≥ 200000 operating cycles at AC-4</b>	
<ul style="list-style-type: none"> <li>• at 400 V Rated value</li> </ul>	54 A
<ul style="list-style-type: none"> <li>• at 690 V Rated value</li> </ul>	48 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• with 1 current path 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> </ul>	160 A 18 A
<ul style="list-style-type: none"> <li>• with 2 current paths in series 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> </ul>	160 A 160 A
<ul style="list-style-type: none"> <li>• with 3 current paths in series 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> </ul>	160 A 160 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• with 1 current path 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 2.5 A
<ul style="list-style-type: none"> <li>• with 2 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>	160 A 160 A
<ul style="list-style-type: none"> <li>• with 3 current paths in series at DC-3 at DC-5</li> </ul>	

— at 110 V Rated value	160 A
— at 24 V Rated value	160 A
<b>Operating power</b>	
• at AC-1	
— at 230 V at 60 °C Rated value	53 kW
— at 690 V at 60 °C Rated value	159 kW
<b>Operating power for ≥ 200000 operating cycles at AC-4</b>	
• at 400 V Rated value	29 kW
• at 690 V Rated value	48 kW
<b>Thermal short-time current restricted to 10 s</b>	1 100 A
<b>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</b>	7 W
<b>No-load switching frequency</b>	
• with AC	2 000 1/h
• for DC	2 000 1/h
<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>Control circuit/ Control:</b>	
<b>Type of voltage of the control supply voltage</b>	AC/DC
<b>Control supply voltage with AC</b>	
• at 50 Hz Rated value	110 ... 127 V
• at 60 Hz Rated value	110 ... 127 V
<b>Control supply voltage for DC</b>	
• Rated value	110 ... 127 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>Apparent pick-up power of the magnet coil with AC</b>	300 V·A
<b>Inductive power factor with closing power of the coil</b>	0.9
<b>Apparent holding power of the magnet coil with AC</b>	5.8 V·A
<b>Inductive power factor with the holding power of the coil</b>	0.8
<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
<b>Closing delay</b>	
• with AC	20 ... 95 ms
• for DC	20 ... 95 ms
<b>Arcing time</b>	10 ... 15 ms

#### 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
Operating current at AC-12 maximum	10 A
<b>Operating current at AC-15</b>	
• at 230 V Rated value	6 A
• at 400 V Rated value	3 A
<b>Operating current at DC-12</b>	
• at 60 V Rated value	6 A
• at 110 V Rated value	3 A
• at 220 V Rated value	1 A
<b>Operating current at DC-13</b>	
• at 24 V Rated value	10 A
• at 60 V Rated value	2 A
• at 110 V Rated value	1 A
• at 220 V Rated value	0.3 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	fuse gL/gG: 355 A
— with type of assignment 2 required	fuse gL/gG: 315 A
• for short-circuit protection of the auxiliary switch required	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> <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>	screw-type terminals screw-type terminals
<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>— 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> </ul>	max. 2x 70 mm <sup>2</sup> max. 1x 50, 1x 70 mm <sup>2</sup> max. 1x 50, 1x 70 mm <sup>2</sup>  2x 1/0
<b>Type of connectable conductor cross-section</b> <ul style="list-style-type: none"> <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>	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>	<b>Test Certificates</b>
 CSA	 UL	 EAC	<a href="#">Type Examination</a>  EG-Konf.
			<a href="#">Special Test Certificate</a>

<b>Test Certificates</b>	<b>Shipping Approval</b>	<b>other</b>
<a href="#">Type Test Certificates/Test Report</a>	 ABS	 DNV
	 GL	 RMRS
		<a href="#">Environmental Confirmations</a>

<b>other</b>
<a href="#">Confirmation</a>
<a href="#">other</a>

### 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**

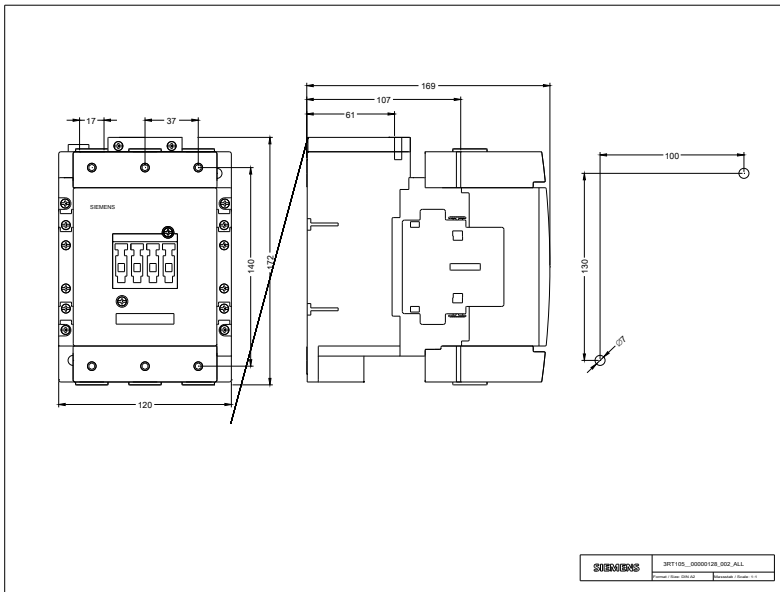
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RT10541AF36>

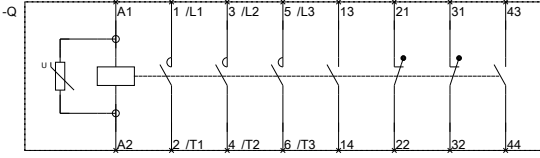
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10541AF36>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RT10541AF36&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RT10541AF36&lang=en)





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