



CONTACTOR, 90KW/400V/AC-3, AC(40...60HZ)/DC  
OPERATION UC 380...420V AUXIL. CONTACTS  
2NO+2NC 3-POLE, SIZE S6 BAR CONNECTIONS  
CONVENT. OPERATING MECHANISM SCREW  
TERMINAL

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:

<b>Insulation voltage</b>		
• Rated value	V	1 000
<b>Degree of pollution</b>		3
<b>Surge voltage resistance Rated value</b>	kV	8
<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>	A	1 480
<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>	A A A A A A A	215 215 185 185 170 160
<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>	A A A A	160 18 160 2.5
<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>	A A A A	160 160 160 160
<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>	A A A A	160 160 160 160
<b>Operating power</b>		
<ul style="list-style-type: none"> <li>• at AC-1 at 400 V Rated value</li> <li>• at AC-2 at 400 V Rated value</li> <li>• at AC-4 at 400 V Rated value</li> </ul>	kW kW W	121 104 90 000
<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> <li>— at 690 V Rated value</li> </ul> </li> <li>• at AC-3</li> </ul>	kW kW kW	70 210 210

— at 230 V Rated value	kW	61
— at 400 V Rated value	kW	104
— at 500 V Rated value	kW	132
— at 690 V Rated value	kW	167
<b>Operating power for <math>\geq 200000</math> operating cycles at AC-4</b>		
• at 400 V Rated value	kW	45
• at 690 V Rated value	kW	65
<b>Operating frequency</b>		
• at AC-3 maximum	1/h	750

#### 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	V	380 ... 420
• at 60 Hz Rated value	V	380 ... 420
<b>Control supply voltage for DC</b>		
• Rated value	V	380 ... 420
• Rated value	Hz	40
<b>Control supply voltage frequency 2 Rated value</b>	Hz	60
<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>	V·A	300
<b>Apparent holding power of the magnet coil with AC</b>	V·A	5.8
<b>Closing power of the magnet coil for DC</b>	W	360
<b>Holding power of the magnet coil for DC</b>	W	5.2
<b>Inductive power factor</b>		
• with closing power of the coil		0.9
• with the holding power of the coil		0.8

#### 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	A	6

<ul style="list-style-type: none"> <li>• at 400 V Rated value</li> </ul>	A	3
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• at DC-12 at 220 V Rated value</li> </ul>	A	1
<ul style="list-style-type: none"> <li>• at DC-13 at 220 V Rated value</li> </ul>	A	0.3
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• at DC-12 <ul style="list-style-type: none"> <li>— at 60 V Rated value</li> <li>— at 110 V Rated value</li> </ul> </li> </ul>	A	6
	A	3
<ul style="list-style-type: none"> <li>• at DC-13 <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> </ul> </li> </ul>	A	10
	A	2
	A	1

<b>UL/CSA ratings:</b>		
<b>Contact rating of the auxiliary contacts acc. to UL</b>		A600 / Q600

<b>Short-circuit:</b>		
<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>		<p>fuse gL/gG: 355 A</p> <p>fuse gL/gG: 315 A</p> <p>fuse gL/gG: 10 A</p>

<b>Installation/ mounting/ dimensions:</b>		
<b>Mounting type</b>		screw fixing
<ul style="list-style-type: none"> <li>• Side-by-side mounting</li> </ul>		Yes
<b>Height</b>	mm	172
<b>Width</b>	mm	120
<b>Depth</b>	mm	170
<b>Required spacing</b>		
<ul style="list-style-type: none"> <li>• for grounded parts <ul style="list-style-type: none"> <li>— at the side</li> </ul> </li> </ul>	mm	10

<b>Connections/ Terminals:</b>		
<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 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>4 ... 250 kcmil</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:

Size of contactor S6

## Ambient conditions:

Installation altitude at height above sea level maximum m 2 000

### Ambient temperature

- during operation °C -25 ... +60
- during storage °C -55 ... +80

## Certificates/ approvals:

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



[Type Test Certificates/Test Report](#)

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



GL



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## other

[Environmental Confirmations](#)

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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

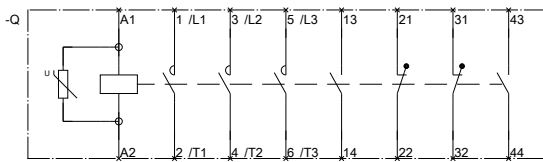
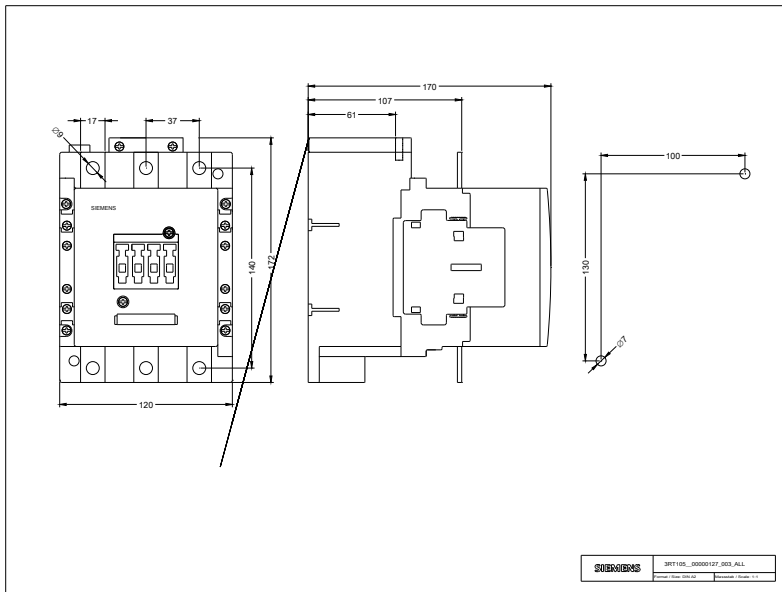
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10566AV36>

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

<http://support.automation.siemens.com/WW/view/en/3RT10566AV36/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT10566AV36&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10566AV36&lang=en)



last modified:

11.03.2015

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