



CONTACTOR, 160KW/400V/AC-3 AC(40...60HZ)/DC OPERATION  
UC 380-420V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE  
S10 BAR CONNECTIONS CONVENT. OPERATING MECHANISM  
SCREW TERMINAL

Figure similar

<b>product brand name</b>	SIRIUS
<b>Product designation</b>	power contactor
<b>General technical data:</b>	
<b>Size of contactor</b>	S10
<b>Insulation voltage</b>	
• Rated value	1 000 V
<b>Surge voltage resistance Rated value</b>	8 kV
<b>Protection class IP</b>	
• on the front	IP00
• of the terminal	IP00
<b>Degree of pollution</b>	3
<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>Ambient conditions:</b>	
<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>	
<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>	330 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>	330 A 300 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>	300 A 280 A
<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>	185 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• at 40 °C minimum permissible</li> </ul>	185 mm <sup>2</sup>
<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>	125 A
<ul style="list-style-type: none"> <li>• at 690 V Rated value</li> </ul>	115 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>	300 A 33 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>	300 A 300 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>	300 A 300 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>	300 A 3 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>	300 A 300 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>	300 A 300 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 400 V Rated value</li> </ul> </li> </ul>	113 kW 197 kW

— at 690 V Rated value	340 kW
— at 690 V at 60 °C Rated value	340 kW
• at AC-2 at 400 V Rated value	171 kW
• at AC-3	
— at 230 V Rated value	97 kW
— at 400 V Rated value	171 kW
— at 500 V Rated value	215 kW
— at 690 V Rated value	280 kW
<b>Operating power for ≥ 200000 operating cycles at AC-4</b>	
• at 400 V Rated value	71 kW
• at 690 V Rated value	112 kW
<b>Thermal short-time current restricted to 10 s</b>	2 400 A
<b>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</b>	22 W
<b>No-load switching frequency</b>	
• at AC	2 000 1/h
• at DC	2 000 1/h
<b>Operating frequency</b>	
• at AC-1 maximum	750 1/h
• at AC-2 maximum	250 1/h
• at AC-3 maximum	500 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 at AC</b>	
• at 50 Hz Rated value	380 ... 420 V
• at 60 Hz Rated value	380 ... 420 V
<b>Control supply voltage at DC</b>	
• Rated value	380 ... 420 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 at 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 at DC</b>	0.8 ... 1.1
<b>Design of the surge suppressor</b>	with varistor
<b>Apparent pick-up power of the magnet coil at AC</b>	590 V·A
<b>Inductive power factor with closing power of the coil</b>	0.9
<b>Apparent holding power of the magnet coil at AC</b>	6.7 V·A

Inductive power factor with the holding power of the coil	0.9
Closing power of the magnet coil at DC	650 W
Holding power of the magnet coil for DC	7.4 W
<b>Closing delay</b>	
• at AC	30 ... 95 ms
• at DC	30 ... 95 ms
<b>Opening delay</b>	
• at AC	40 ... 80 ms
• at DC	40 ... 80 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:

Contact rating of the auxiliary contacts acc. to UL	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: 500 A
— with type of assignment 2 required	fuse gL/gG: 400 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>	210 mm
<b>Width</b>	145 mm
<b>Depth</b>	202 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 AWG conductors for main contacts	2/0 ... 500 kcmil
<b>Type of connectable conductor cross-section</b>	
• 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

#### Certificates/ approvals:

<b>General Product Approval</b>	<b>Functional Safety/Safety of Machinery</b>	<b>Declaration of Conformity</b>
 CCC	 UL	 EG-Konf.
 CSA	 EAC	<a href="#">Baumusterbescheinigung</a>

<b>Test Certificates</b>	<b>Shipping Approval</b>
<a href="#">spezielle Prüfbescheinigungen</a> <a href="#">Typprüfbescheinigung/Werkszeugnis</a>	 ABS
	 DNV
	 GL
	 RMRS

<b>other</b>
<a href="#">Bestätigungen</a>
<a href="#">Umweltbestätigung</a>
<a href="#">sonstig</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**

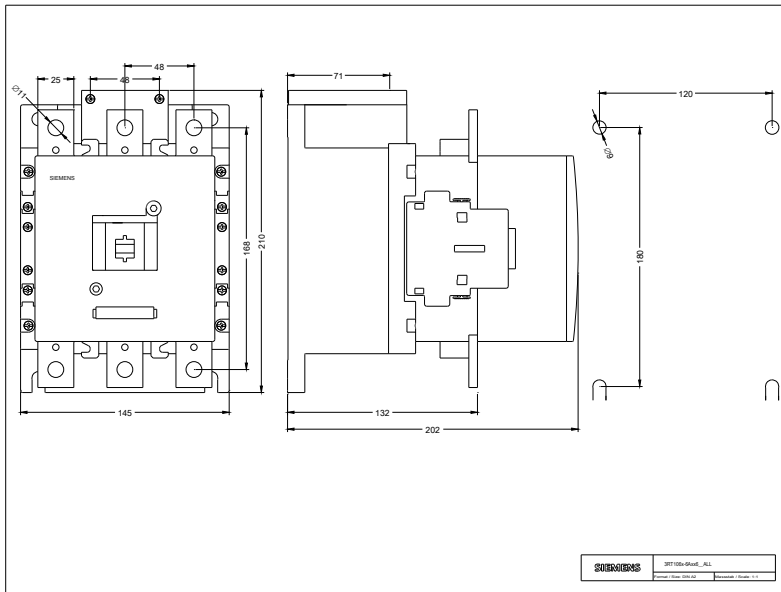
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RT10666AV36>

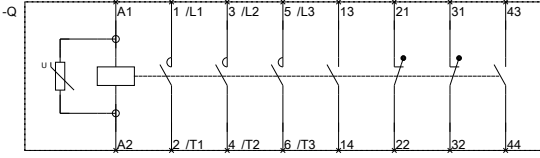
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10666AV36>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RT10666AV36&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RT10666AV36&lang=en)





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