



Figure similar

CONTACTOR, 200KW/400V/AC-3 AC(40...60HZ)/DC OPERATION  
UC 220-240V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE  
S12 BAR CONNECTIONS CONVENT. OPERATING MECHANISM  
SCREW TERMINAL

product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	S12
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>	
• at 60 °C minimum permissible	240 mm <sup>2</sup>
• at 40 °C minimum permissible	300 mm <sup>2</sup>
<b>Operating current</b>	
• at AC-1 at 400 V	
— at ambient temperature 40 °C Rated value	430 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C Rated value	430 A
— at ambient temperature 60 °C Rated value	400 A
• at AC-3	
— at 400 V Rated value	400 A
— at 690 V Rated value	400 A
• at AC-4 at 400 V Rated value	350 A
<b>Operating current for ≥ 200000 operating cycles at AC-4</b>	
• at 400 V Rated value	150 A
• at 690 V Rated value	135 A
<b>Operating current</b>	
• with 1 current path at DC-1	
— at 24 V Rated value	400 A
— at 110 V Rated value	33 A
• with 2 current paths in series at DC-1	
— at 24 V Rated value	400 A
— at 110 V Rated value	400 A
• with 3 current paths in series at DC-1	
— at 24 V Rated value	400 A
— at 110 V Rated value	400 A
<b>Operating current</b>	
• with 1 current path at DC-3 at DC-5	
— at 24 V Rated value	400 A
— at 110 V Rated value	3 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	400 A
— at 24 V Rated value	400 A
• with 3 current paths in series at DC-3 at DC-5	

— at 110 V Rated value	400 A
— at 24 V Rated value	400 A
<b>Operating power</b>	
• at AC-1	
— at 230 V at 60 °C Rated value	151 kW
— at 690 V at 60 °C Rated value	454 kW
<b>Operating power for ≥ 200000 operating cycles at AC-4</b>	
• at 400 V Rated value	85 kW
• at 690 V Rated value	133 kW
<b>Thermal short-time current restricted to 10 s</b>	3 200 A
<b>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</b>	35 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	700 1/h
• at AC-2 maximum	200 1/h
• at AC-3 maximum	500 1/h
• at AC-4 maximum	130 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>Apparent pick-up power of the magnet coil with AC</b>	830 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>	9.2 V·A
<b>Inductive power factor with the holding power of the coil</b>	0.9
<b>Closing power of the magnet coil for DC</b>	920 W

<b>Holding power of the magnet coil for DC</b>	10 W
<b>Closing delay</b>	
• with AC	45 ... 100 ms
• for DC	45 ... 100 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
--	-------------

#### 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: 630 A
— with type of assignment 2 required	fuse gL/gG: 500 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>	214 mm
<b>Width</b>	160 mm
<b>Depth</b>	225 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 AWG conductors for main contacts</li> </ul>	2/0 ... 500 kcmil
<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:

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

Test Certificates	Shipping Approval		
<a href="#">Special Test Certificate</a> <a href="#">Type Test Certificates/Test Report</a> <a href="#">other</a>			
	ABS	DNV	GL

Shipping Approval	other		
	<a href="#">other</a>	<a href="#">Confirmation</a>	<a href="#">Environmental Confirmations</a>
RMRS			

#### Further information

##### Information- and Downloadcenter (Catalogs, Brochures,...)

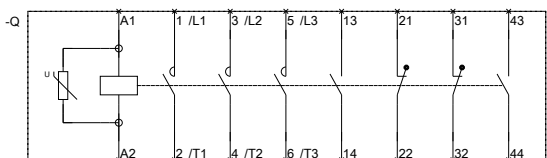
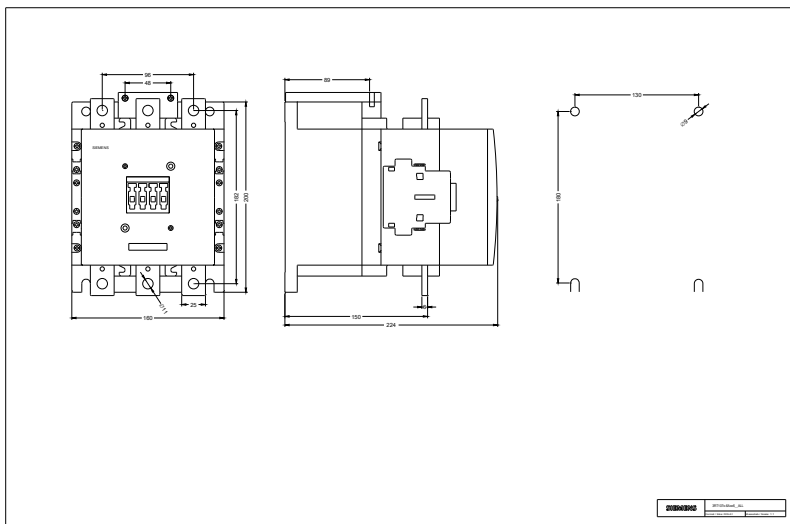
<http://www.siemens.com/industrial-controls/catalogs>

##### 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=3RT10756AP36>



3RT106.-A\_6\_01\_4\_IEC.DXF  
3RT107.-A\_6\_01\_4\_IEC.DXF

**last modified:**

02.06.2015