## **SIEMENS**

Data sheet 3RT1056-6AS36



CONTACTOR, 90KW/400V/AC-3, AC(40...60HZ)/DC OPERATION UC 500...550V 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:					
Insulation voltage					
Rated value	V	1 000			
Degree of pollution		3			
Surge voltage resistance Rated value	kV	8			
Mechanical service life (switching cycles)					
<ul> <li>of the contactor typical</li> </ul>		10 000 000			
<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>		5 000 000			
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>		10 000 000			
Thermal short-time current restricted to 10 s	Α	1 480			
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			

Main circuit:		
Number of poles for main current circuit	3	
Number of NC contacts for main contacts	0	
Number of NO contacts for main contacts	3	
Operating current		

• at AC-1		
— at 400 V at ambient temperature 40 °C	Α	215
Rated value		
— up to 690 V at ambient temperature 40 °C	Α	215
Rated value		
— up to 690 V at ambient temperature 60 °C	Α	185
Rated value		
• at AC-3		
— at 400 V Rated value	Α	185
— at 690 V Rated value	Α	170
• at AC-4 at 400 V Rated value	Α	160
Operating current with 1 current path		
● at DC-1		
— at 24 V Rated value	Α	160
— at 110 V Rated value	Α	18
• at DC-3 at DC-5		
— at 24 V Rated value	Α	160
— at 110 V Rated value	Α	2.5
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	160
— at 110 V Rated value	Α	160
• at DC-3 at DC-5		
— at 110 V Rated value	Α	160
— at 24 V Rated value	Α	160
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	160
— at 110 V Rated value	Α	160
• at DC-3 at DC-5		
— at 110 V Rated value	Α	160
— at 24 V Rated value	Α	160
Operating power		
• at AC-1 at 400 V Rated value	kW	121
• at AC-2 at 400 V Rated value	kW	104
• at AC-4 at 400 V Rated value	W	90 000
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	70
— at 690 V at 60 °C Rated value	kW	210
— at 690 V Rated value	kW	210
• at AC-3		

— 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
Operating power for ≥ 200000 operating cycles at		
AC-4		
● at 400 V Rated value	kW	45
• at 690 V Rated value	kW	65
Operating frequency		
• at AC-3 maximum	1/h	750

Control circuit/ Control:				
Type of voltage of the control supply voltage		AC/DC		
Control supply voltage with AC				
● at 50 Hz Rated value	V	500 550		
● at 60 Hz Rated value	V	500 550		
Control supply voltage for DC				
Rated value	V	500 550		
Rated value	Hz	40		
Control supply voltage frequency 2 Rated value	Hz	60		
Operating range factor control supply voltage rated				
value of the magnet coil with AC				
● at 50 Hz		0.8 1.1		
● at 60 Hz		0.8 1.1		
Operating range factor control supply voltage rated		0.8 1.1		
value of the magnet coil for DC				
Design of the surge suppressor		with varistor		
Apparent pick-up power of the magnet coil with AC	V·A	300		
Apparent holding power of the magnet coil with AC	V·A	5.8		
Closing power of the magnet coil for DC	W	360		
Holding power of the magnet coil for DC	W	5.2		
Inductive power factor				
<ul> <li>with closing power of the coil</li> </ul>		0.9		
<ul> <li>with the holding power of the coil</li> </ul>		0.8		

Auxiliary circuit:				
Number of NC contacts				
<ul> <li>for auxiliary contacts</li> </ul>				
— instantaneous contact		2		
Number of NO contacts				
<ul> <li>for auxiliary contacts</li> </ul>				
— instantaneous contact		2		
Operating current at AC-15				
• at 230 V Rated value	Α	6		

• at 400 V Rated value	Α	3
Operating current		
• at DC-12 at 220 V Rated value	Α	1
• at DC-13 at 220 V Rated value	Α	0.3
Operating current		
• at DC-12		
— at 60 V Rated value	Α	6
— at 110 V Rated value	Α	3
• at DC-13		
— at 24 V Rated value	Α	10
— at 60 V Rated value	Α	2
— at 110 V Rated value	Α	1
UL/CSA ratings:		
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600
Short-circuit:		
Design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
<ul> <li>— with type of assignment 1 required</li> </ul>		fuse gL/gG: 355 A
<ul> <li>with type of assignment 2 required</li> </ul>		fuse gL/gG: 315 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>		fuse gL/gG: 10 A
Installation/ mounting/ dimensions:  Mounting type		screw fixing
Side-by-side mounting		Yes
Height	mm	172
Width	mm	120
Depth	mm	170
Required spacing		
• for grounded parts		
— at the side	mm	10
Connections/ Terminals:		
Type of electrical connection		
• for main current circuit		screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Type of connectable conductor cross-section		
• for AWG conductors for main contacts		4 250 kcmil
• for auxiliary contacts		
— solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• for AWG conductors for auxiliary contacts		2x (20 16), 2x (18 14), 1x 12

Mechanical data:				
Size of contactor		S6		
Ambient conditions:				
Installation altitude at height above sea level	m	2 000		
maximum				
Ambient temperature				
<ul><li>during operation</li></ul>	°C	-25 <b>+</b> 60		
during storage	°C	-55 <b>+</b> 80		

## Certificates/ approvals:

General Product Approval		Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates	
	(UL	EHE	Type Examination	C E	Special Test Certificate

EG-Konf.

Test Certificates			other
Type Test Certificates/Test Report	<u>jå</u> <sub>DNV</sub>		Environmental Confirmations
Report		GL W	RMRS

## other

other

Confirmation

## Further information

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

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

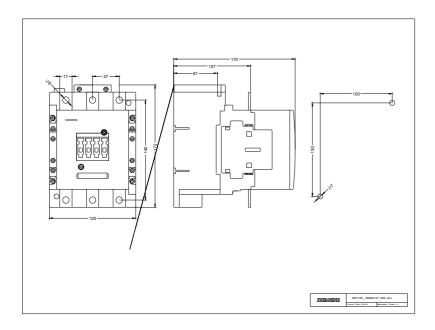
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

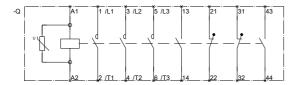
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http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10566AS36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT10566AS36/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=3RT10566AS36&lang=en





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