SIEMENS

Data sheet

3RT1056-6NB36



CONTACTOR, 90KW/400V/AC-3, AC(40...60HZ)/DC OPERATION UC 21...27.3V AUXIL. CONTACTS 2NO+2NC 3-POLE, SIZE S6 BAR CONNECTIONS ELECTRONIC OPERATING MECHANISM WITH 24V DC PLC INTERFACE 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)		
 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
Thermal short-time current restricted to 10 s	А	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
Aain 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	А	215
Rated value		
— up to 690 V at ambient temperature 40 °C	A	215
Rated value		
— up to 690 V at ambient temperature 60 °C	А	185
Rated value		
• at AC-3		
— at 400 V Rated value	A	185
— at 690 V Rated value	А	170
• at AC-4 at 400 V Rated value	А	160
Operating current with 1 current path		
● at DC-1		
— at 24 V Rated value	А	160
— at 110 V Rated value	А	18
• at DC-3 at DC-5		
— at 24 V Rated value	А	160
— at 110 V Rated value	А	2.5
Operating current with 2 current paths in series		
● at DC-1		
— at 24 V Rated value	А	160
— at 110 V Rated value	А	160
• at DC-3 at DC-5		
— at 110 V Rated value	А	160
— at 24 V Rated value	А	160
Operating current with 3 current paths in series		
● at DC-1		
— at 24 V Rated value	А	160
— at 110 V Rated value	А	160
• at DC-3 at DC-5		
— at 110 V Rated value	А	160
— at 24 V Rated value	А	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 \geq 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	21 27.3
• at 60 Hz Rated value	V	21 27.3
Control supply voltage for DC	_	
Rated value	V	21 27.3
 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 value of the magnet coil for DC		0.8 1.1
Design of the surge suppressor	_	with varistor
Apparent pick-up power of the magnet coil with AC	V·A	280
Apparent holding power of the magnet coil with AC	V·A	4.4
Closing power of the magnet coil for DC	W	320
Holding power of the magnet coil for DC	W	2.8
Inductive power factor	_	
 with closing power of the coil 		0.8
 with the holding power of the coil 		0.4
Auxiliary circuit:		
Number of NC contacts		
 for auxiliary contacts 		
— instantaneous contact		2
Number of NO contacts		
 for auxiliary contacts 		
— instantaneous contact		2
Operating current at AC-15		
• at 230 V Rated value	А	6

	٨	0		
at 400 V Rated value	A	3		
Operating current				
• at DC-12 at 220 V Rated value	A	1		
at DC-13 at 220 V Rated value	A	0.3		
Operating current				
• at DC-12				
— at 60 V Rated value	A	6		
— at 110 V Rated value	А	3		
• at DC-13				
— at 24 V Rated value	А	10		
— at 60 V Rated value	А	2		
— at 110 V Rated value	А	1		
UL/CSA ratings:				
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600		
Short-circuit:				
Design of the fuse link				
 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 		fuse gL/gG: 10 A		
required				
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		
 for auxiliary and control current circuit 		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)		
— finely stranded with core end processing		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		
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Mechanical data:		
Size of contactor		S6
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
 during operation 	°C	-25 +60
 during storage 	°C	-55 +80

Certificates/ approvals: **General Product Approval Functional Declaration of** Test Safety/Safety Conformity Certificates of Machinery **Type Examination** Type Test Certificates/Test Report Test **Shipping Approval** other Certificates **Special Test** Environmental Certificate Confirmations GL

other			
Confirmation	other		

GL

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=3RT10566NB36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT10566NB36/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=3RT10566NB36&lang=en



