SIEMENS

Data sheet 3RT1456-6AF36



CONTACTOR, 275A/AC-1, AC(40...60HZ)/DC OPERATION UC 110...127V AUXIL. CONTACTS 2NO+2NC 3-POLE, SIZE S6 BAR CONNECTIONS CONVENT. OPERATING MECHANISM

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
A.Ain-circuita		

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	275
Rated value	7.	210
— up to 690 V at ambient temperature 40 °C	Α	275
Rated value		
— up to 690 V at ambient temperature 60 °C	Α	250
Rated value		
• at AC-3		
— at 400 V Rated value	Α	97
— at 690 V Rated value	Α	97
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	250
— at 110 V Rated value	Α	18
• at DC-3 at DC-5		
— at 24 V Rated value	Α	250
— 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	250
— at 110 V Rated value	Α	250
• at DC-3 at DC-5		
— at 110 V Rated value	Α	250
— at 24 V Rated value	Α	250
Operating current with 3 current paths in series	-	
• at DC-1		
— at 24 V Rated value	Α	250
— at 110 V Rated value	Α	250
• at DC-3 at DC-5		
— at 110 V Rated value	Α	250
— at 24 V Rated value	Α	250
Operating power		
• at AC-1 at 400 V Rated value	kW	165
• at AC-2 at 400 V Rated value	kW	55
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	95
— at 690 V at 60 °C Rated value	kW	285
— at 690 V Rated value	kW	285
• at AC-3		
— at 230 V Rated value	kW	30
— at 400 V Rated value	kW	55

— at 500 V Rated value	kW	55
— at 690 V Rated value	kW	90

Control circuit/ Control:			
Type of voltage of the control supply voltage		AC/DC	
Control supply voltage with AC			
● at 50 Hz Rated value	V	110 127	
• at 60 Hz Rated value	V	110 127	
Control supply voltage for DC			
Rated value	V	110 127	
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	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			
 with closing power of the coil 		0.9	
 with the holding power of the coil 		0.8	
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	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

- at 110 V Rated value

6

3

Α

• at DC-13		
— at 24 V Rated value	Α	10
— at 60 V Rated value	Α	2
— at 110 V Rated value	Α	1
— at 110 v Nateu value	, ,	· ·
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: 350 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
Mechanical data:		
Size of contactor		\$6
Ambient conditions:	m	2,000
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
during operation	°C	-25 +60

°C -55 ... +80 • during storage

Certificates/ approvals:

General Product Approval	Functional	Declaration of	Test	
	Safety/Safety	Conformity	Certificates	
	of Machinery			







Type Examination



other

Special Test Certificate

Shipping Approval







GL



other

Confirmation

other

Environmental Confirmations

Further information

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

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

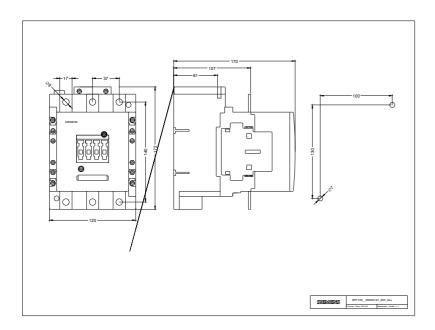
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

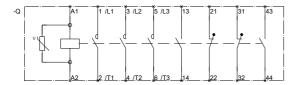
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT14566AF36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT14566AF36/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=3RT14566AF36&lang=en





3RT106.-.A..6_01_4_IEC.DXF 3RT107.-.A..6_01_4_IEC.DXF

last modified: 11.03.2015