SIEMENS

Data sheet 3RT1456-6AD36



CONTACTOR, 275A/AC-1, AC(40...60HZ)/DC OPERATION UC 42...48V AUXIL. CONTACTS 2NO+2NC 3-POLE, SIZE S6 BAR CONNECTIONS CONVENT. OPERATING MECHANISM

Figure similar

product brand name	SIRIUS
Product designation	power contactor

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	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	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	42 48
• at 60 Hz Rated value	V	42 48
Control supply voltage for DC		
Rated value	V	42 48
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		
 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

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	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:		1000 / 0000
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 required 		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
 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
finally attached with any and apparation		(0.75 4 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— finely stranded with core end processing		2x (20 16), 2x (18 14), 1x 12
for AWG conductors for auxiliary contacts		24 (20 10), 24 (10 14), 14 12
Mechanical data:		
Size of contactor		S6
Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
during operation	°C	-25 + 60

• during storage °C -55 ... +80

Certificates/ approvals:

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



Test	Shipping Approval	other
Certificates		

Special Test Certificate









Confirmation

other

Environmental Confirmations

other

Further information

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

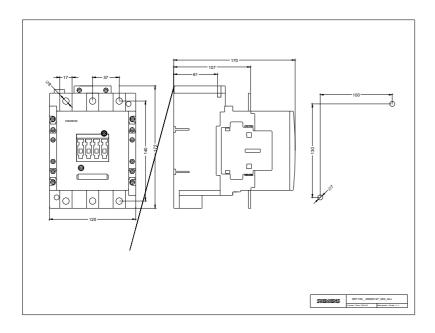
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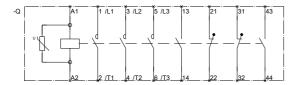
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT14566AD36

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

http://support.automation.siemens.com/WW/view/en/3RT14566AD36/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=3RT14566AD36&lang=en





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last modified: 11.03.2015