SIEMENS

Data sheet

3RT1456-6AB38-0PA5



CONTACTOR, 275A/AC-1, AC(40...60HZ)/DC OPERATION UC 23...26V AUX.CONT.2NO+2NC SOLID-STATE COMP., 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
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	А	275
Rated value		
— up to 690 V at ambient temperature 40 $^\circ C$	А	275
Rated value		
— up to 690 V at ambient temperature 60 °C	A	250
Rated value		
• at AC-3		
— at 400 V Rated value	A	97
— at 690 V Rated value	A	97
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	250
— at 110 V Rated value	A	18
• at DC-3 at DC-5		
— at 24 V Rated value	A	250
— at 110 V Rated value	A	2.5
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	A	250
— at 110 V Rated value	A	250
• at DC-3 at DC-5		
— at 110 V Rated value	A	250
— at 24 V Rated value	A	250
Operating current with 3 current paths in series		
● at DC-1		
— at 24 V Rated value	A	250
— at 110 V Rated value	A	250
• at DC-3 at DC-5		
— at 110 V Rated value	A	250
— at 24 V Rated value	A	250
Operating power		165
• 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		05
— 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 valuekW55 at 690 V Rated valuekW90Control circuit/ Control:Type of voltage of the control supply voltageAC/DCControl supply voltage with AC• at 50 Hz Rated valueV23 26• at 60 Hz Rated valueV23 26Control supply voltage for DC• Rated valueV23 26Control supply voltage for DC• Rated valueV23 26Control supply voltage for DC• Rated valueHz40Control supply voltage frequency 2 Rated valueHz60Operating range factor control supply voltage rated value of the magnet coil with AC-0.8 1.1• at 50 Hz0.8 1.10.8 1.1	
Control circuit/ Control: AC/DC Type of voltage of the control supply voltage AC/DC Control supply voltage with AC - • at 50 Hz Rated value V 23 26 • at 60 Hz Rated value V 23 26 Control supply voltage for DC - - • Rated value V 23 26 Control supply voltage for DC - - • Rated value V 23 26 Control supply voltage frequency 2 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 -	
Type of voltage of the control supply voltageAC/DCControl supply voltage with AC-• at 50 Hz Rated valueV23 26• at 60 Hz Rated valueV23 26Control supply voltage for DC-• Rated valueV23 26Control supply voltage for DC-• Rated valueV23 26Operating range frequency 2 Rated valueHz40Operating range factor control supply voltage rated value of the magnet coil with AC• at 50 Hz0.8 1.1	
Control supply voltage with ACImage: Control supply voltage with AC• at 50 Hz Rated valueV23 26• at 60 Hz Rated valueV23 26Control supply voltage for DCImage: Control supply voltage for DC• Rated valueV23 26• Rated valueV23 26• Rated valueHz40Control supply voltage frequency 2 Rated valueHz60Operating range factor control supply voltage rated value of the magnet coil with ACImage: Control supply voltage rated value0.8 1.1	
• at 50 Hz Rated valueV23 26• at 60 Hz Rated valueV23 26Control supply voltage for DC-• Rated valueV23 26• Rated valueV23 26• Rated valueHz40Control supply voltage frequency 2 Rated valueHz60Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz0.8 1.1	
• at 60 Hz Rated valueV23 26• at 60 Hz Rated valueV23 26• Rated valueV23 26• Rated valueHz40• Rated valueHz60• Control supply voltage frequency 2 Rated valueHz60• Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz0.8 1.1	
Control supply voltage for DCV23 26• Rated valueVZ23 26• Rated valueHz40Control supply voltage frequency 2 Rated valueHz60Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz0.8 1.1	
 Rated value Rated value Rated value V 23 26 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 	
• Rated value Hz 40 • 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	
Control supply voltage frequency 2 Rated value Hz 60 Operating range factor control supply voltage rated value of the magnet coil with AC 0.8 1.1	
Operating range factor control supply voltage rated 0.8 1.1 • at 50 Hz 0.8 1.1	
• 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 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 A 6	
• 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 A 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: 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 (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		S6
Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature	-	
during operation	°C	-25 +60

 during stora 	age		°C	-55 +80		
Certificates/ app	rovals:					
General Proc	luct Approval			Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
(SA)		EHE		Type Examination	EG-Konf.	Special Test Certificate
Shipping App	proval			other		
Shipping App	oroval GL			other Environmental Confirmations	other	Confirmation
Shipping App		RMRS		Environmental	other	Confirmation

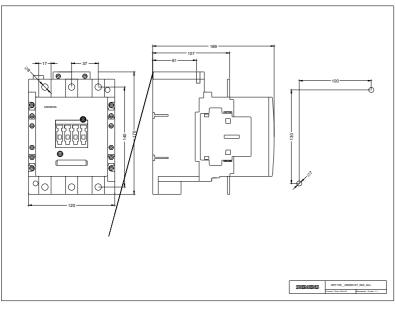
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