SIEMENS

Data sheet 3RT1054-1AR36



CONTACTOR, 55KW/400V/AC-3, AC(40...60HZ)/DC OPERATION UC 440...480V AUX. CONTACTS 2NO+2NC, 3-POLE, SIZE S6 WITH BOX TERMINALS CONVENTIONAL OPERATING MECHAN. 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	Α	1 100	
Protection class IP			
• on the front		IP20	
• 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	160
Rated value		
— up to 690 V at ambient temperature 40 °C	Α	160
Rated value		
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$	Α	140
Rated value		
• at AC-3		
— at 400 V Rated value	Α	115
— at 690 V Rated value	Α	115
● at AC-4 at 400 V Rated value	Α	97
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	92
• at AC-2 at 400 V Rated value	kW	64
• at AC-4 at 400 V Rated value	W	55 000
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	53
— at 690 V at 60 °C Rated value	kW	159
— at 690 V Rated value	kW	159
• at AC-3		

— at 230 V Rated value	kW	37
— at 400 V Rated value	kW	64
— at 500 V Rated value	kW	81
— at 690 V Rated value	kW	113
Operating power for ≥ 200000 operating cycles at		
AC-4		
• at 400 V Rated value	kW	29
• at 690 V Rated value	kW	48
Operating frequency		
• at AC-3 maximum	1/h	1 000

Control circuit/ Control:		
Type of voltage of the control supply voltage		AC/DC
Control supply voltage with AC		
● at 50 Hz Rated value	V	440 480
● at 60 Hz Rated value	V	440 480
Control supply voltage for DC		
Rated value	V	440 480
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
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:		
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 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 main contacts		
— stranded		max. 2x 70 mm²
— finely stranded with core end processing		max. 1x 50, 1x 70 mm²
— finely stranded without core end		max. 1x 50, 1x 70 mm²
processing		
 for AWG conductors for main contacts 		2x 1/0

• for auxiliary contacts

- solid

- finely stranded with core end processing

• for AWG conductors for auxiliary contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

Mechanical data:

Size of contactor S6

Ambient conditions:

maximum

Installation altitude at height above sea level 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 Certificates

Shipping Approval

Type Test
Certificates/Test
Report

Special Test Certificate







GL



other

Confirmation

Environmental Confirmations

other

Further information

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

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

Industry Mall (Online ordering system)

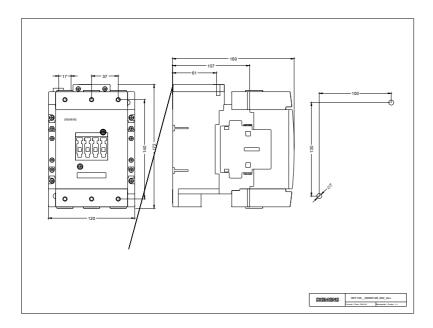
http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10541AR36

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

http://support.automation.siemens.com/WW/view/en/3RT10541AR36/all





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