SIEMENS

Product data sheet 3RT2327-1AP60



4NO CONTACTOR, AC1: 50A DC 220V 50HZ, 240V 60HZ 4-POLE, 4NO, SZ: S0, SCREW TERMINAL 1NO+1NC INTEGR.

General technical data:		
product brand name		SIRIUS
Size of the contactor		S0
Product extension / auxiliary switch		Yes
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-55 +80
during operating	°C	-25 +60
Shock resistance		
at rectangular impulse		
• at AC		8,3g / 5 ms, 5,3g / 10 ms
at sine pulse		
• at AC		13,5g / 5 ms, 8,3g / 10 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Mechanical operating cycles as operating time		
of the contactor / typical		10,000,000

 of the contactor with added auxiliary swit 	ch block / typical
--	--------------------

• of the contactor with added electronics-compatible auxiliary switch block / typical

10,000,000
5,000,000

Main circuit:		
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		4
Operating current		
• at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	Α	50
• at 60 °C ambient temperature / rated value	Α	42
• at AC-2 / at 400 V / rated value	Α	17
• at AC-3 / at 400 V / rated value	Α	15.5
• at AC-4 / at 400 V / rated value	Α	15.5
Operating current		
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	4.5
 with 2 current paths in series / at DC-1 		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	15
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
Service power		
• at AC-2 / at 400 V / rated value	kW	9
• at AC-3 / at 400 V / rated value	kW	7.5
• at AC-4 / at 400 V / rated value	kW	7.5
Active power loss / per conductor / typical	W	1.6
Off-load operating frequency		
• at AC	1/h	5,000

• at DC	1/h	1,500
Frequency of operation / at AC-1 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-2 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-4 / according to IEC 60947-6-2	1/h	300

Control circuit:		
Design of the surge suppressor		with varistor
Type of voltage / of the controlled supply voltage		AC
Control supply voltage / 1		
• at 50 Hz / for AC / rated value	V	220
• at 60 Hz / for AC / rated value	V	240
Operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz / for AC		0.8 1.1
• at 60 Hz / for AC		0.85 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	87
Apparent holding power / of the solenoid / for AC	V-A	9.8
Closing delay		
• at AC	ms	8 40
Opening delay		
• at AC	ms	4 16
Arcing time	ms	10 10

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		1
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	Α	10
• at AC-15		
• at 230 V	Α	10
• at 400 V	Α	3
• at DC-12		
• at 48 V	Α	6
• at 60 V	Α	6
• at 110 V	Α	3
• at 220 V	Α	1
• at DC-13		

• at 24 V	Α	10
• at 48 V	Α	2
• at 60 V	Α	2
• at 110 V	Α	1
• at 220 V	Α	0.3

Short-circuit:	
Design of the fuse link	
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
• for short-circuit protection of the main circuit	
with type of assignment 1 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
• at type of coordination 2 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25A

Installation/mounting/dimensions:		
mounting position		+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Type of fixing/fixation / series installation		Yes
Width	mm	45
Height	mm	85
Depth	mm	97
Distance, to be maintained, to the ranks assembly / sidewards	mm	0
Distance, to be maintained, to earthed part / sidewards	mm	6

Connections:	
Design of the electrical connection	
for main current circuit	screw-type terminals
 for auxiliary and control current circuit 	screw-type terminals
Type of the connectable conductor cross-section	
• for main contacts	
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
• finely stranded	
 with conductor end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
• for AWG conductors / for main contacts	2x (16 12), 2x (14 8)
for auxiliary contacts	
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• finely stranded	
 with conductor 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)

Certificates/approvals:

General Product Approval









Declaration of Conformity

Test Certificates

Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval







GL







Shipping Approval

otnei



Confirmation



UL/CSA ratings:		
yielded mechanical performance (hp)		
for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	1
• at 230 V / rated value	hp	3
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	3
• at 220/230 V / rated value	hp	5
• at 460/480 V / rated value	hp	10
• at 575/600 V / rated value	hp	15
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	14
• at 600 V / rated value	Α	17
Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600

Sicherheitsrelevante Kenngrößen:			
B10 value / with high demand rate			
according to SN 31920		1,000,000	
T1 value / for proof test interval or service life			
according to IEC 61508	а	20	
Proportion of dangerous failures			
• with low demand rate / according to SN 31920	%	40	

• with high demand rate / according to SN 31920	%	73
Failure rate (FIT value) / with low demand rate		
• according to SN 31920	FIT	100
Product function		
• mirror contact to IEC 60947-4-1		Yes
 positively driven operation to IEC 60947-5-1 		No

Further information:

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

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

Industry Mall (Online ordering system)

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

Cax online generator:

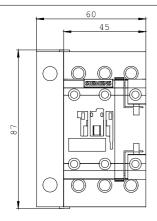
http://www.siemens.com/cax

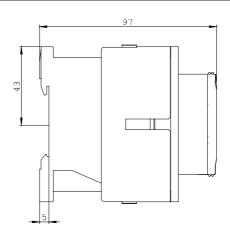
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

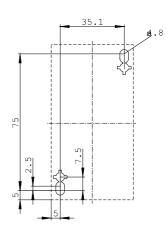
http://support.automation.siemens.com/WW/view/en/3RT2327-1AP60/all

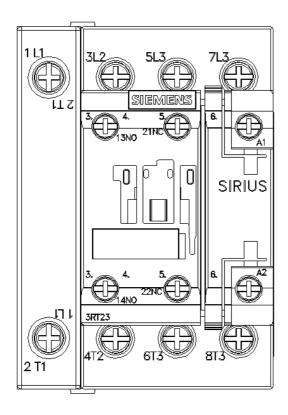
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

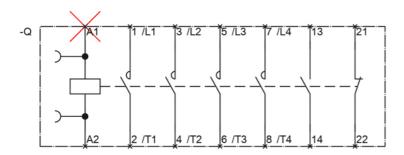
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2327-1AP60











last change: Jul 26, 2012