SIEMENS

Product data sheet 3RT2327-1AB00



4NO CONTACTOR, AC1: 50A AC 24V 50HZ 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
Product extension / function module for communication		No
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

Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1	V	400
Mechanical operating cycles as operating time		
of the contactor / typical		10,000,000
of the contactor with added auxiliary switch block / typical		10,000,000
 of the contactor with added electronics-compatible auxiliary switch block / typical 		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
Connectable conductor cross-section / in main circuit		
• at AC-1		
• at 40 °C / minimum permissible	m²	10
• at 60 °C / minimum permissible	m²	10
Operational current		
• 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
Operational current		
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	4.5
• at 220 V / rated value	Α	1
• at 440 V / rated value	Α	0.4
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
• at 220 V / rated value	Α	1
• at 440 V / rated value	Α	1
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	Α	35
• at 110 V / rated value	Α	35
• at 220 V / rated value	Α	42
• at 440 V / rated value	Α	2.9
Operational current		
• 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
• at 220 V / rated value	Α	1
• at 440 V / rated value	Α	0.09
• 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
• at 220 V / rated value	Α	3
• at 440 V / rated value	Α	0.27
• 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
• at 220 V / rated value	Α	10
• at 440 V / rated value	Α	0.6
Service power		
• at AC-1		
• at 230 V / rated value	kW	28
• at 400 V / rated value	kW	23
• at AC-2 / at 400 V / rated value	kW	9
• at AC-3		
• at 230 V / rated value	kW	4
• at 400 V / rated value	kW	7.5
• at AC-4 / at 400 V / rated value	kW	7.5
Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductor	W	2.7
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
• at AC-2 / according to IEC 60947-6-2	1/h	750
• at AC-3 / according to IEC 60947-6-2	1/h	750
• at AC-4 / according to IEC 60947-6-2	1/h	250

Control circuit:		
Type of voltage / of the controlled supply voltage		AC
Control supply voltage		
• at 50 Hz / at AC / rated value	V	24
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	77
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		
• [nicht versorgt: PMD_ABP551_001_000]		
•	Α	2
• at 690 V	Α	1

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

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

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	61
Height	mm	85
Depth	mm	97
Distance, to be maintained, to the ranks assembly / sidewards	mm	0

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)

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
- positively driven operation to IEC 60947-5-1

Yes No

Certificates/approvals:

General Product Approval

EMC

Functional Safety / Safety of Machinery

Type Examination











Declaration of Conformity

Test Certificates



Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval













Shipping Approval

other





Confirmation



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

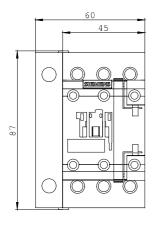
http://www.siemens.com/cax

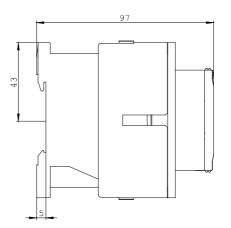
 ${\bf Service \& Support\ (Manuals,\ Certificates,\ Characteristics,\ FAQs,...)}$

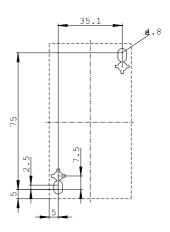
 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RT2327-1AB00/all}}$

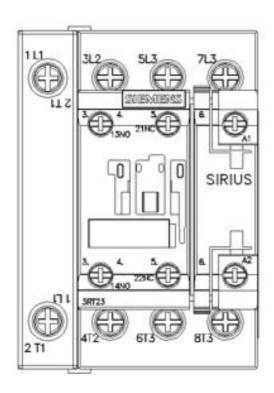
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

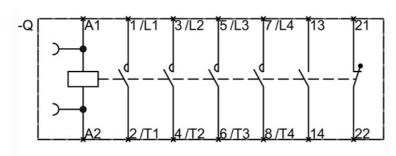
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