SIEMENS

Product data sheet

3RT2025-2AG24



CONTACTOR, AC-3, 7.5KW/400V, 2NO+2NC, AC110V 50/60HZ, 3-POLE, SZ S0 SPRING-LOADED TERMINAL REMOVABLE AUX. SWITCH

General technical data:			
Product brand name		SIRIUS	
Size of the contactor		S0	
Product extension / auxiliary switch		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	
Ambient temperature / during operating	°C	-25 60	
Shock resistance			
• at rectangular impulse			
• at AC		7,5g / 5 ms, 4,7g / 10 ms	
• at sine pulse			
• at AC		11,8g / 5 ms, 7,4g / 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 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		3	
Operating current			
• at AC-1 / at 400 V			
• at 40 °C ambient temperature / rated value	А	40	
• at 60 °C ambient temperature / rated value	А	35	
• at AC-2 / at 400 V / rated value	А	17	
• at AC-3 / at 400 V / rated value	А	17	
• at AC-4 / at 400 V / rated value	А	15.5	
Operating current			
• with 1 current path / at DC-1			
• at 24 V / rated value	А	35	
• at 110 V / rated value	А	4.5	
• with 2 current paths in series / at DC-1			
• at 24 V / rated value	А	35	
• at 110 V / rated value	А	35	
• with 3 current paths in series / at DC-1			
• at 24 V / rated value	А	35	
• at 110 V / rated value	А	35	
• with 1 current path / at DC-3 / at DC-5			
• at 24 V / rated value	А	20	
• at 110 V / rated value	А	2.5	
• with 2 current paths in series / at DC-3 / at DC-5			
• at 24 V / rated value	А	35	
• at 110 V / rated value	А	15	
• with 3 current paths in series / at DC-3 / at DC-5			
• at 24 V / rated value	А	35	
• at 110 V / rated value	А	35	
Service power			
• at AC-2 / at 400 V / rated value	kW	7.5	
• 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	0.9	
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 / maximum	1/h	1,000
• at AC-2 / according to IEC 60947-6-2 / maximum	1/h	1,000
• at AC-3 / according to IEC 60947-6-2 / maximum	1/h	1,000
• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	300

Control circuit:		
Type of voltage / of the controlled supply voltage		AC
Control supply voltage / 1		
• at 50 Hz / for AC / rated value	V	110
• at 60 Hz / for AC / rated value	V	110
Working range factor 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	68
Apparent holding power / of the solenoid / for AC	V·A	7.9
Inductive power factor		
with the pull-in power of the coil		0.82
with the pull-in power of the coil		0.25
Closing delay		
• at AC	ms	9 38
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		2
Number of NO contacts / for auxiliary contacts / instantaneous switching		2
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	А	10
• at AC-15		
• at 230 V	А	6
• at 400 V	А	3
• at DC-12		
• at 48 V	А	6
• at 60 V	А	6
• at 110 V	А	3

• at 220 V	А	1
• at DC-13		
• at 24 V	А	6
• at 48 V	А	2
• at 60 V	А	2
• at 110 V	А	1
• at 220 V	А	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:			
Built in orientation		vertical	
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	102	
Depth	mm	144	
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	spring-loaded terminals
 for auxiliary and control current circuit 	spring-loaded terminals
Type of the connectable conductor cross-section	
for main contacts	
• solid	2x (1 10 mm²)
stranded	2x (1 10 mm²)
finely stranded	
 with conductor end processing 	2x (1 6 mm2)
without conductor final cutting	2x (1 6 mm2)
 for AWG conductors / for main contacts 	1x (18 8)
for auxiliary contacts	
• solid	2x (0.5 2.5 mm2)

finely stranded				
 with conductor end processing 			2x (0.5 1.5 mm2)	
 without conductor final cutting 			2 x (0.5 1.5 mm2)	
for AWG conductors / for auxiliary contacts	3		2x (20 14)	
Certificates/approvals:				
General Product Approval			Test Certificates	
cqc CSA	ROSTEST		Manufacturer	
Shipping Approval				
ABS DNV	GL	Llovd's Register LRS	PRS	RINA
Shipping Approval other				
RMRS Manufacturer	VDE			
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 so	quirrel cage motors			
• at 480 V / rated value		А	14	
• at 600 V / rated value		А	17	
Contact rating designation / for auxiliary co UL	ntacts / according to		A600 / Q600	

Safety:related Parameter:		
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

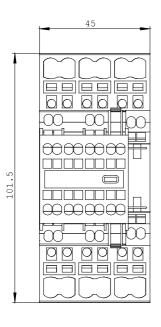
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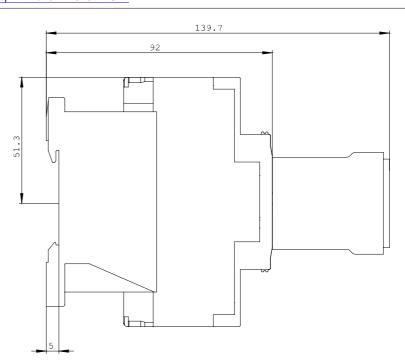
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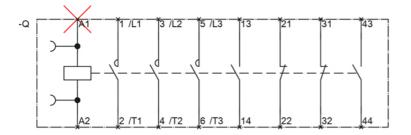
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RT2025-2AG24/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2025-2AG24







last change:

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