SIEMENS

Product data sheet



CONTACTOR, AC-3, 5.5KW/400V, 1NC, DC 24V, 3-POLE, SZ S00 SCREW TERMINAL .

General technical data:			
product brand name		SIRIUS	
Size of the contactor		S00	
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	
Ambient temperature / during operating	°C	-25 +60	
Shock resistance			
• at rectangular impulse			
• at DC		7.3g / 5 ms, 4.7g / 10 ms	
• at sine pulse			
• at DC		11,4g / 5 ms, 7,3g / 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		30,000,000	
• 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	22
at 60 °C ambient temperature / rated value	А	20
• at AC-2 / at 400 V / rated value	А	12
• at AC-3 / at 400 V / rated value	А	12
• at AC-4 / at 400 V / rated value	А	8.5
Operating current	_	
with 1 current path / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	2.1
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	12
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	20
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	0.1
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	0.35
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	20
Service power		
• at AC-2 / at 400 V / rated value	kW	5.5
• at AC-3 / at 400 V / rated value	kW	5.5
• at AC-4 / at 400 V / rated value	kW	4
Active power loss / per conductor / typical	W	1.2
Off-load operating frequency		
• at AC	1/h	10,000
• at DC	1/h	10,000

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	750
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	750
Frequency of operation / at AC-4 / according to IEC 60947-6-2	1/h	250
Control circuit:		
Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1	_	
• for DC / rated value	V	24
operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.8 1.1
Pull-in power / of the solenoid / for DC	W	4
Holding power / of the solenoid / for DC	W	4
Closing delay	_	
• at DC	ms	30 100
Opening delay	_	
• at DC	ms	7 13
Arcing time	ms	10 15
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		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	А	10
• at AC-15		

Number of NC contacts / for auxiliary contacts / instantaneous switching		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		0
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: 35 A
at type of coordination 2 / required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A
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	57.5
Depth	mm	73
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 (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
finely stranded		
with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG conductors / for main contacts		2x (20 16), 2x (18 14), 2x 12
for auxiliary contacts		
• solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 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), 2x 12

Certificates/approvals:

General Product Ap	proval			Declaration of C	conformity
	(SA)	GOST		EG-Konf.	
Test Certificates					
Special Test Certificate	<u>Type Test</u> Certificates/Test <u>Report</u>				
Shipping Approval					
ABS		GL	Llovd's Register	PRS	RINA
Shipping Approval	other				
RMRS	<u>Confirmation</u>				
UL/CSA ratings:					
yielded mechanical p	erformance (hp)				
 for single-phase so 	quirrel cage motors				
• at 110/120 V / r	ated value		hp	0.5	
• at 230 V / rated value			hp	2	
 for three-phase squirrel cage motors 					
• at 200/208 V / r	ated value		hp	3	
• at 220/230 V / r	ated value		hp	3	
• at 460/480 V / r	ated value		hp	7.5	
• at 575/600 V / r	ated value		hp	10	
Operating current (FL	_A) / for three-phase s	squirrel cage motors	-		
• at 480 V / rated va	lue		А	11	
• at 600 V / rated va	llue		А	11	
Contact rating designation / for auxiliary contacts / according to UL			A600 / Q600		
Safety:related Para	ameter:				
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 danger	ous failures				
• with low demand ra	ate / according to SN 3	1920	%	40	
	rate / according to SN		%	73	
Failure rate (FIT value					

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)

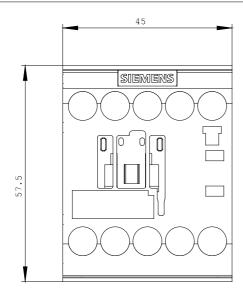
http://www.siemens.com/industrial-controls/mall

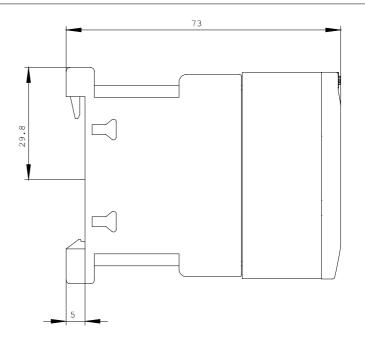
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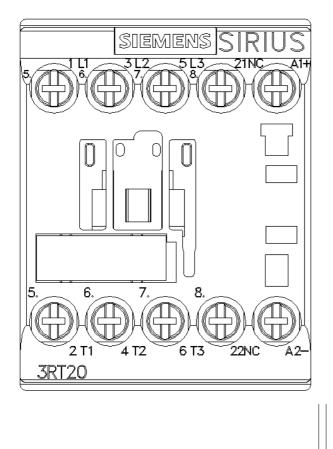
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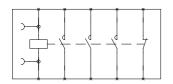
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT2017-1BB42/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2017-1BB42









last change:

