SIEMENS

Data sheet 3RT1023-1AG20



CONTACTOR, AC-3 4KW/400V, AC 110 V, 50/60HZ, 3-POLE, SIZE S0, SCREW CONNECTION

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:	
Degree of pollution	3
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
Protection class IP	
• on the front	IP20
• of the terminal	IP20
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 Rated value 	Α	40

Rated value	,,	
— up to 690 V at ambient temperature 60 °C	Α	35
Rated value		
• at AC-3		
— at 400 V Rated value	Α	9
• at AC-4 at 400 V Rated value	Α	8.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	4.5
• at DC-3 at DC-5		
— at 24 V Rated value	Α	20
— 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	35
— at 110 V Rated value	Α	35
• at DC-3 at DC-5		
— at 110 V Rated value	Α	15
— at 24 V Rated value	Α	35
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	35
— at 110 V Rated value	Α	35
• at DC-3 at DC-5		
— at 110 V Rated value	Α	35
— at 24 V Rated value	Α	35
Operating power		
• at AC-1 at 400 V Rated value	kW	23
• at AC-2 at 400 V Rated value	kW	4
• at AC-4 at 400 V Rated value	W	4 000
Operating power		
• at AC-3		
— at 400 V Rated value	kW	4
— at 500 V Rated value	kW	4.5
— at 690 V Rated value	kW	5.5
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
• at 50 Hz Rated value	V	110

40

— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$

• at 60 Hz Rated value	V	110
Rated value	Hz	50
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		0.85 1.1
Apparent pick-up power of the magnet coil with AC	V·A	64
Apparent holding power of the magnet coil with AC	V·A	8.4
Inductive power factor		
 with closing power of the coil 		0.72
 with the holding power of the coil 		0.24

Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact		0
Number of NO contacts		
• for auxiliary contacts		
 instantaneous contact 		0
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
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)

Short-circuit:		
Design of the fuse link		
 for short-circuit protection of the main circuit 		
— with type of assignment 1 required	fuse g	L/gG: 63 A
— with type of assignment 2 required	fuse g	L/gG: 25 A
 for short-circuit protection of the auxiliary switch required 	fuse g	L/gG: 10 A

nstallation/ mounting/ dimensions:		
Mounting type		screw and snap-on mounting onto 35 mm standard
		mounting rail according to DIN EN 50022
Side-by-side mounting		Yes
Height	mm	85
Width	mm	45
Depth	mm	91
Required spacing		
 for grounded parts 		
— at the side	mm	6
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		
— solid		2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²
 single or multi-stranded 		2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²
 finely stranded with core end processing 		2x (1 2.5 mm²), 2x (2.5 6 mm²)
 for AWG conductors for main contacts 		2x (16 12), 2x (14 10), 1x 8
• for auxiliary contacts		
— solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x
		(0.75 4 mm²)
 finely stranded with core 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), 1x 12
Mechanical data:		
Size of contactor		S0
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
during operation	°C	-25 + 60

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



Test Certificates

Shipping Approval

Special Test Certificate Type Test
Certificates/Test
Report









GL

Shipping Approval other



other

Environmental Confirmations

Confirmation



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Cax online generator

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