SIEMENS

Product data sheet 3RT1023-1AC20



CONTACTOR, AC-3 4KW/400V, AC 24 V, 50/60 HZ, 3-POLE, SIZE S0, SCREW CONNECTION

General technical data:		
product brand name		SIRIUS
Size of contactor		S0
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature		
during operation	°C	-25 +60
Mechanical service life (switching cycles)		
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

• 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	А	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	А	35
• at 110 V / Rated value	Α	35
Operating 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
 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
Operating power		
• at AC-1		
• at 400 V / Rated value	kW	23
• at AC-2		
• at 400 V / Rated value	kW	4
• 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
• at AC-4		
• at 400 V / Rated value	W	4,000
Active power loss / at AC-3 / at 400 V / for rated value of the operating current / per conductor	W	0.4
Control circuit/ Control:		
Type of voltage / of the control supply voltage		AC
Control supply voltage		
• with AC / at 50 Hz / Rated value	V	24

Α

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• at AC-3 / at 400 V / Rated value

• with AC / at 60 Hz / Rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil		
• with AC / at 50 Hz		0.8 1.1
• with AC / at 60 Hz		0.8 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:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous contact		0
Number of NO contacts / for auxiliary contacts / instantaneous contact		0
Operating current		
• at AC-12 / maximum	Α	10
• at AC-15		
• at 230 V / Rated value	Α	6
• at 400 V / Rated value	Α	3
Operating current / at DC-12		
at 60 V / Rated value	Α	6
• at 110 V / Rated value	Α	3
at 220 V / Rated value	Α	1
Operating current / at DC-13		
at 24 V / Rated value	Α	10
at 60 V / Rated value	Α	2
• at 110 V / Rated value	Α	1
• at 220 V / Rated value	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 	fuse gL/gG: 63 A
 with type of assignment 2 / required 	fuse gL/gG: 25 A

Installation/ mounting/ dimensions:	
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

Mounting type / Side-by-side mounting		Yes
Width	mm	45
Height	mm	85
Depth	mm	91
Spacing required / for grounded parts	mm	6

Connections/ terminals:	
Design of the 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
• finely stranded	
 with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²)
• for AWG conductors / for main contacts	2x (20 16), 2x (18 14), 1x 12
• 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

Certificates/ approvals:

General Product Approval

Functional Safety / Safety of Machinery Declaration of Conformity









Type Examination



Test Certificates

Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval











other

Confirmation

other

Environmental Confirmations

Further information:

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

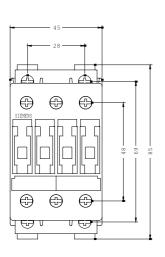
http://www.siemens.com/cax

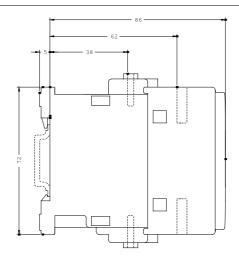
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

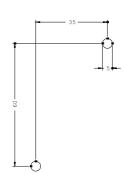
http://support.automation.siemens.com/WW/view/en/3RT1023-1AC20/all

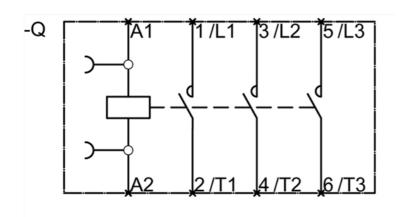
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1023-1AC20









last change: Nov 11, 2014