SIEMENS

Product data sheet 3RT1023-1AL20



CONTACTOR, AC-3 4KW/400V, AC 230V 50/60 HZ, 3-POLE, SIZE S0, SCREW CONNECTION

General technical data:		
product brand name		SIRIUS
Size of the contactor		S0
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature / during operating	°C	-25 +60
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	Α	40	
• at AC-3 / at 400 V / rated value	Α	9	
• at AC-4 / at 400 V / rated value	Α	8.5	

• with 1 current path / at DC-1		
• at 24 V / rated value	Α	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	Α	35
• at 110 V / rated value	Α	35
• 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
Service power		
• at AC-2 / at 400 V / rated value	kW	4
• at AC-3 / at 400 V / rated value	kW	4
• at AC-4 / at 400 V / rated value	W	4,000

Control circuit:		
Voltage type / of control feed voltage		AC
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		0.8 1.1
Apparent pull-in power / of the solenoid / for AC	V-A	64
Apparent holding power / of the solenoid / for AC	V·A	8.4
Inductive power factor / with the pull-in power of the coil		0.72
Inductive power factor / with the pull-in 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 switching	0
Number of NO contacts / for auxiliary contacts / instantaneous switching	0

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
 at type of coordination 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
series installation		Yes
Width	mm	45
Height	mm	85
Depth	mm	91
Distance, to be maintained, to earthed part / sidewards	mm	6

Connection type:	
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 6 mm²), max. 2x 10 mm²
• finely stranded	
 with conductor 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 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), 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

Shipping Approval





Report



GL





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/industrial-controls/mall

Cax online generator:

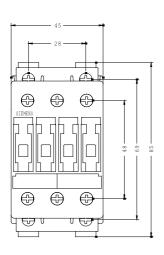
http://www.siemens.com/cax

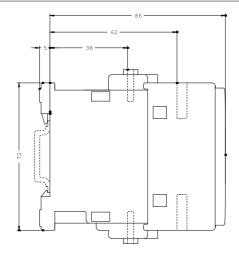
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

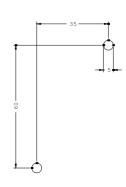
http://support.automation.siemens.com/WW/view/en/3RT1023-1AL20/all

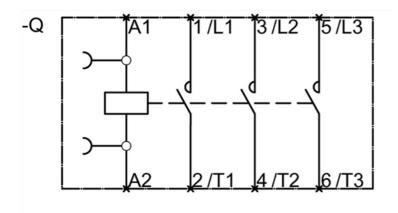
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1023-1AL20}$









last change: Jul 28, 2014