SIEMENS

Product data sheet 3RT1025-1AL20



CONTACTOR, AC-3 7,5 KW/400 V, AC 230 V, 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 60 °C ambient temperature / rated value	Α	35
• at AC-3 / at 400 V / rated value	Α	17

• at AC-4 / at 400 V / rated value	Α	15.5
• 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	7.5
• at AC-3 / at 400 V / rated value	kW	7.5
• at AC-4 / at 400 V / rated value	W	7,500

Control circuit:		
Type of voltage / of the controlled supply 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

• for short-circuit protection of the main circuit

• with type of assignment 1 / required

• at type of coordination 2 / required

fuse gL/gG: 10 A

fuse gL/gG: 63 A

fuse gL/gG: 25 A

Installation/mounting/dimensions

Type of mounting		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

• for auxiliary and control current circuit

screw-type terminals

screw-type terminals

Type of the connectable conductor cross-section

• for main contacts

• solid

• finely stranded

• with conductor end processing

• for AWG conductors / for main contacts

• for auxiliary contacts

• finely stranded

• solid

• with conductor end processing

• for AWG conductors / for auxiliary contacts

2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), max. 2x 10 mm²

2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x

(0.75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

Certificates/approvals:

General Product Approval

Functional Safety / Safety of Machinery















Test Certificates



Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval







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:

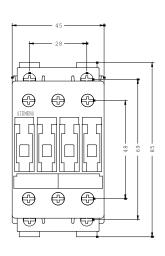
http://www.siemens.com/cax

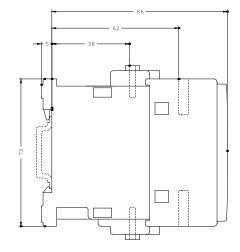
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

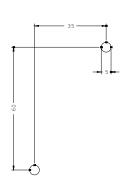
http://support.automation.siemens.com/WW/view/en/3RT1025-1AL20/all

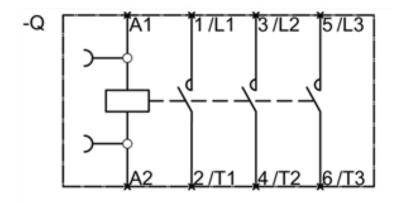
$Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1025-1AL20}$









last change: Aug 12, 2013