SIEMENS

Product data sheet 3RT1516-1AP00



CONTACTOR, AC-3 4 KW/400 V, AC-1 18 A, AC 230V 50/60HZ, 4-POLE, 2 NO + 2 NC, SIZE S00, SCREW CONNECTION

General technical data:		
product brand name		SIRIUS
Size of the contactor		S00
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
during operating	°C	-25 +60
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	2
Number of NO contacts / for main contacts	2
Operating current / at AC-2 / at AC-3	

• at 400 V		
• per NO contact / rated value	Α	9
• per NC contact / rated value	Α	9
Operating current		
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	16
• at 110 V / rated value	Α	2.1
• at 220 V / rated value	Α	0.8
• at 440 V / rated value	Α	0.6
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	Α	16
• at 110 V / rated value	Α	12
• at 220 V / rated value	Α	1.6
• at 440 V / rated value	Α	0.8
Operating current		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V		
• per NO contact / rated value	Α	16
• per NC contact / rated value	Α	16
• at 110 V		
• per NO contact / rated value	Α	0.15
• per NC contact / rated value	Α	0.075
• at 220 V		
• per NO contact / rated value	Α	0.75
• per NC contact / rated value	Α	0.375
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V		
• per NO contact / rated value	Α	16
• per NC contact / rated value	Α	16
• at 110 V		
• per NO contact / rated value	Α	0.35
• per NC contact / rated value	Α	0.175
Operating performance		
• at AC-1		
• at 230 V / rated value	kW	6.5
• at 400 V / rated value	kW	11
• at AC-2 / at AC-3		
• at 230 V		
• per NO contact / rated value	kW	3
	KVV	

• at 400 V		
• per NO contact / rated value	kW	4
• per NC contact / rated value	kW	4
Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor	W	0.7
Frequency of operation		
• with AC-1 / maximum	1/h	1,000
• at AC-2 / at AC-3 / maximum	1/h	750
Control circuit:		
Voltage type / of control feed voltage		AC
Control supply voltage		
• at 50 Hz / at AC / rated value	V	230
• at 60 Hz / at AC / rated value	V	230
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		0.85 1.1
Apparent pull-in power / of the solenoid / for AC	V-A	27
Apparent holding power / of the solenoid / for AC	V-A	4.4
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.27
Closing delay		
• at AC	ms	8 35
• at DC	ms	25 100
Opening delay		
• at AC	ms	4 30
• at DC	ms	7 10
Arcing time	ms	10 15
Residual current / of electronics / for control with signal <0>		
• at 230 V / with AC / maximum permissible	А	0.0030
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
Operating current		
• at AC-12 / maximum	А	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: 35 A
• at type of coordination 2 / required	fuse gL/gG: 20 A

Installation/mounting/dimensions:		
mounting position		with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Mounting type / series installation		Yes
Width	mm	45
Height	mm	57.5
Depth	mm	72

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), 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 main contacts	2x (20 16), 2x (18 14), 1x 12
for auxiliary contacts	

• solid

· finely stranded

• with conductor end processing

• for AWG conductors / for auxiliary contacts

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











Type Examination

Declaration of Conformity

Test Certificates



Special Test Certificate

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

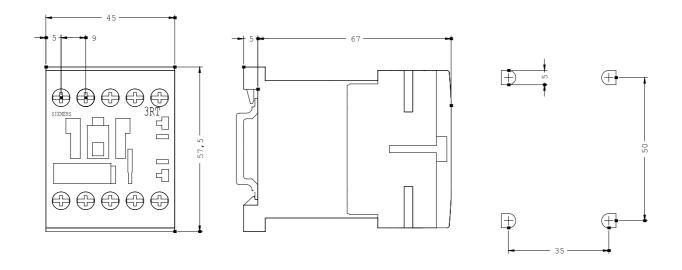
http://www.siemens.com/cax

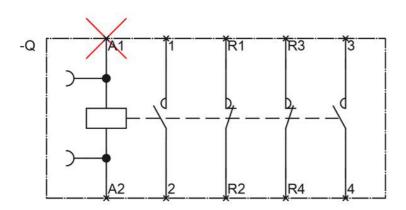
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RT1516-1AP00/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1516-1AP00}$





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