SIEMENS

Product data sheet

3RT1016-1BB42



CONTACTOR, AC-3 4 KW/400 V, 1 NC, DC 24 V, 3-POLE, SIZE S00, SCREW CONNECTION

General technical data:			
product brand name		SIRIUS	
Size of the contactor		S00	
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		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		0	
Number of NO contacts / for main contacts		3	
Operating current			
• at AC-1 / at 400 V			
• at 40 °C ambient temperature / rated value	А	22	
• at 60 °C ambient temperature / rated value	А	20	
• at AC-3 / at 400 V / rated value	А	9	

• at AC-4 / at 400 V / rated value	А	8.5
• with 1 current path / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	2.1
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	12
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	20
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	0.15
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	0.35
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	20
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
Active power loss / per conductor / typical	W	0.7

Control circuit:		
Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1	-	
• for DC		
rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.85 1.1
Pull-in power / of the solenoid / for DC	W	3.3
Holding power / of the solenoid / for DC	W	3.3

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	1
Number of NO contacts / for auxiliary contacts / instantaneous switching	0

Operating current / of the auxiliary contacts		
• at AC-12 / maximum	А	10
• at AC-15		
• at 230 V	А	6
• at 400 V	А	3
• at DC-12		
• at 60 V	А	6
• at 110 V	А	3
• at 220 V	А	1
• at DC-13		
• at 24 V	А	10
• at 60 V	А	2
• at 110 V	А	1
• at 220 V	А	0.3
Chart size it		
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:		
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	57.5
Depth	mm	72
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 (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

Certificates/approvals:

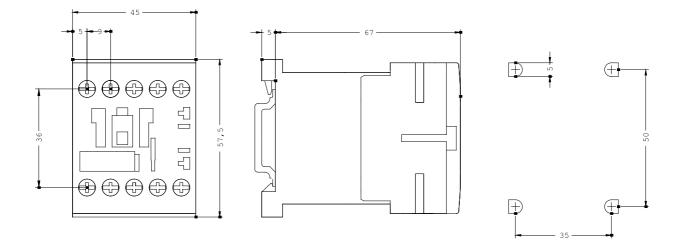
- with conductor end processing
- for AWG conductors / for auxiliary contacts

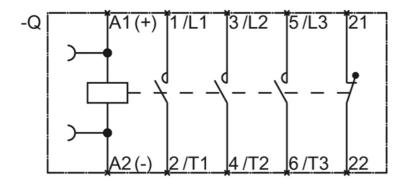
2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14), 1x 12

General Product Ap	proval				
	(SA)	GOST	KETI		GNO UR
Functional Safety / Safety of Machinery	Declaration of Conformity	Test Certificates			
Type Examination	EG-Konf.	other	Special Test Certificate		
Shipping Approval					
ABS		DNV DNV	GLŵ	Lloyd's Register LRS	PRS
Shipping Approval		other			
RINA	RMRS	<u>Confirmation</u>	<u>other</u>	Environmental Confirmations	
Further information	ו:				
	Information- and Downloadcenter (Catalogs, Brochures,) http://www.siemens.com/industrial-controls/catalogs				
Industry Mall (Online http://www.siemens.com	ordering system) m/industrial-controls/ma	<u>II</u>			
Cax online generator: http://www.siemens.com					
Service&Support (Manuals, Certificates, Characteristics, FAQs,) http://support.automation.siemens.com/WW/view/en/3RT1016-1BB42/all					
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams,)					

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1016-1BB42





last change:

Sep 3, 2012