SIEMENS

Data sheet

3RT1016-1BB41

CONTACTOR, AC-3 4 KW/400 V, 1 NO, DC 24 V, 3-POLE, SIZE S00, SCREW CONNECTION



Figure similar

Product brand name	SIRIUS			
Product designation	power contactor			
General technical data				
Size of contactor	S00			
Degree of pollution	3			
Protection class IP				
• on the front	IP20			
• of the terminal	IP20			
Mechanical service life (switching cycles)				
 of contactor typical 	30 000 000			
 of the contactor with added electronics- compatible auxiliary switch block typical 	5 000 000			
 of the contactor with added auxiliary switch block typical 	10 000 000			
Ambient conditions				
Ambient temperature				
 during operation 	-25 +60 °C			

Main circuit	
Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
Number of NC contacts for main contacts	0
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	22 A
● at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	22 A
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-3	
— at 400 V rated value	9 A
• at AC-4 at 400 V rated value	8.5 A
Operating current	
 at 1 current path at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
Operating current	
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	0.15 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
Operating power	
• at AC-1	
— at 400 V rated value	13 kW
• at AC-2 at 400 V rated value	4 kW
● at AC-3	
— at 400 V rated value	4 kW
— at 500 V rated value	4.5 kW

— at 690 V rated value	5.5 kW
Power loss [W] at AC-3 at 400 V for rated value of	0.7 W
the operating current per conductor	
Control circuit/ Control Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
rated value	24 V
	24 V
Operating range factor control supply voltage rated value of magnet coil at DC	
● initial value	0.85
 Full-scale value 	1.1
Closing power of magnet coil at DC	3.3 W
Holding power of magnet coil at DC	3.3 W
Auxiliary circuit	
Number of NC contacts	
 for auxiliary contacts 	
— instantaneous contact	0
Number of NO contacts	
 for auxiliary contacts 	
— instantaneous contact	1
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
at 230 V rated value	6 A
• at 400 V rated value	3 A
Operating current at DC-12	
at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 220 V rated value	1 A
Operating current at DC-13	
at 24 V rated value	10 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
at 220 V rated value	0.3 A
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Short-circuit protection	
Design of the fuse link	
• for short-circuit protection of the main circuit	function $rate (aC)$: 25 A
— with type of coordination 1 required	fuse gL/gG: 35 A
— with type of assignment 2 required	fuse gL/gG: 20 A
 for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 10 A

Mounting type	screw and span on mounting onto 35 mm standard mounting roll		
	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022		
	Yes		
Side-by-side mounting			
Height	57.5 mm		
Width	45 mm		
Depth	72 mm		
Required spacing			
 for grounded parts 			
— at the side	6 mm		
Connections/Terminals			
Type of electrical connection			
 for main current circuit 	screw-type terminals		
 for auxiliary and control current circuit 	screw-type terminals		
Type of connectable conductor cross-sections			
 for main contacts 			
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)		
— single or multi-stranded	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)		
at AWG conductors for main contacts	2x (20 16), 2x (18 14), 1x 12		
Type of connectable conductor cross-sections			
 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)		
 at 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
CCC	(SA)		EHC	Type Examination Certificate	EG-Konf.
Test Certificates	Test Certificates Marine / Shipping				
Special Test Certificate	Miscellaneous	ABS	Llovd's Register LRS	PRS	RINA
Marine / Shipping	g		other		
RMRS	DNV DNV	DNVGLCOM/AF	Environmental Confirmations	<u>Confirmation</u>	Miscellaneous

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

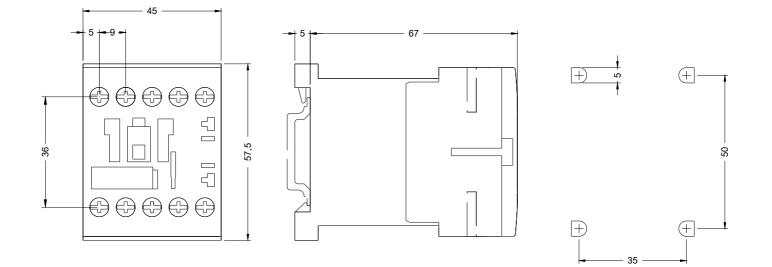
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1016-1BB41

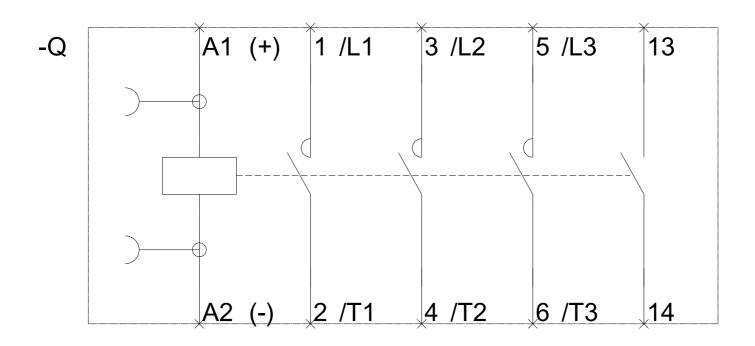
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1016-1BB41

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1BB41

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1016-1BB41&lang=en





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