SIEMENS

Data sheet

3RT1034-1BP44

Power contactor, AC-3 32 A, 15 kW / 400 V 230 V DC, 2 NO + 2 NC, 3-pole, Size S2 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2



Figure similar

Product brand name	
	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S2
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 between coil and main contacts acc. to EN 	400 V
60947-1	
Protection class IP	
• on the front	IP20
• of the terminal	IP00
Shock resistance at rectangular impulse	
• at DC	10g / 5 ms, 5g / 10 ms
Shock resistance with sine pulse	

● at DC	15g / 5 ms, 8g / 10 ms
Mechanical service life (switching cycles)	
 of contactor typical 	10 000 000
 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
Reference code acc. to DIN EN 81346-2	Q
Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Ambient temperature	
 during operation 	-25 +60 °C
 during storage 	-55 +80 °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	0
• at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	50 A
• at AC-1	
	50 A
— up to 690 V at ambient temperature 40 °C rated value	50 A
— up to 690 V at ambient temperature 60 °C rated value	45 A
• at AC-3	
— at 400 V rated value	32 A
— at 690 V rated value	20 A
• at AC-4 at 400 V rated value	29 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	10 mm ²
• at 40 °C minimum permissible	16 mm ²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	15.6 A
at 690 V rated value	11 A
Operating current	
at 1 current path at DC-1	
- at 24 V rated value	45 A
	4.5 A
— at 110 V rated value	1.0 / 1

 with 2 current paths in series at DC-1 	
— at 24 V rated value	45 A
— at 110 V rated value	25 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	45 A
— at 110 V rated value	45 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	45 A
— at 110 V rated value	25 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	45 A
— at 110 V rated value	45 A
Operating power	
● at AC-1	
— at 230 V at 60 °C rated value	18 kW
— at 400 V rated value	31 kW
— at 690 V rated value	54 kW
— at 690 V at 60 °C rated value	54 kW
• at AC-2 at 400 V rated value	15 kW
• at AC-3	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
Operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	8.2 kW
• at 690 V rated value	10 kW
Thermal short-time current limited to 10 s	320 A
Power loss [W] at AC-3 at 400 V for rated value of	1.8 W
the operating current per conductor	
No-load switching frequency	4 500 4/h
• at DC	1 500 1/h
Operating frequency	1 200 4/h
• at AC-1 maximum	1 200 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	250 1/h

Control circuit/ Control				
Type of voltage of the control supply voltage	DC			
Control supply voltage at DC				
• rated value	230 V			
Operating range factor control supply voltage rated				
value of magnet coil at DC				
● initial value	0.8			
Full-scale value	1.1			
Closing power of magnet coil at DC	13.3 W			
Holding power of magnet coil at DC	13.3 W			
Closing delay				
● at DC	50 95 ms			
Opening delay				
• at DC	20 30 ms			
Arcing time	10 15 ms			
Auxiliary circuit				
Number of NC contacts for auxiliary contacts				
 instantaneous contact 	2			
Number of NO contacts for auxiliary contacts				
 instantaneous contact 	2			
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)			
UL/CSA ratings				
Contact rating of auxiliary contacts according to UL	A600 / Q600			
Short-circuit protection				
Design of the fuse link				
 for short-circuit protection of the main circuit 				
— with type of coordination 1 required	fuse gL/gG: 125 A			
— with type of assignment 2 required	fuse gL/gG: 63 A			
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• for short-circuit protection of the auxiliary switch required

fuse gL/gG: 10 A

Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail		
	according to DIN EN 50022		
 Side-by-side mounting 	Yes		
Height	112 mm		
Width	55 mm		
Depth	179 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 (0.75 16 mm²)		
— stranded	2x (0.75 25 mm²)		
— single or multi-stranded	2x (0,75 16 mm²)		
- finely stranded with core end processing	2x (0.75 16 mm²)		
 finely stranded without core end processing 	2x (0.75 16 mm²)		
 at AWG conductors for main contacts 	2x (18 2)		
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		

General Product	Approval			Functional Safety/Safety of Machinery	Declaration of Conformity
	CSA		EAC	<u>Type Examination</u> <u>Certificate</u>	EG-Konf.
Test Certificates		Marine / Shipping			
Type Test Certific- ates/Test Report	Special Test Certi- ficate	Miscellaneous	ABS	Llovd's Register LRS	RINA
Marine / Shippin	g	other			
RMRS	DIVY-GL	<u>Miscellaneous</u>	Confirmation		

urther 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=3RT1034-1BP44

Cax online generator

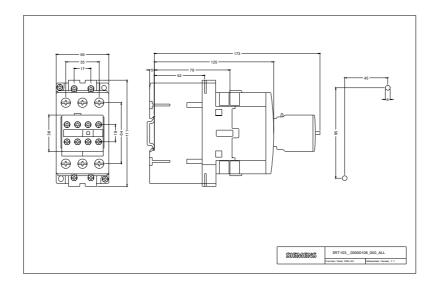
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1034-1BP44

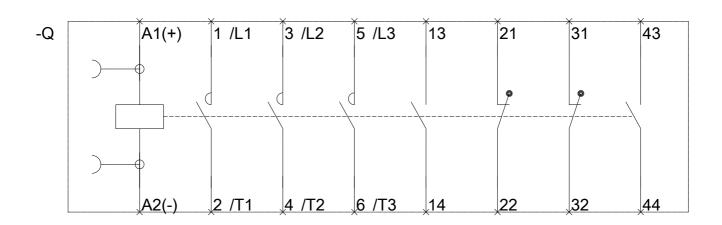
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1BP44

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1034-1BP44&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1BP44/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1034-1BP44&objecttype=14&gridview=view1





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