SIEMENS

Data sheet

3RT1034-1AC00

Power contactor, AC-3 32 A, 15 kW / 400 V 32 V AC, 50 Hz, 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 60947-1 	400 V		
Protection class IP			
• on the front	IP20		
• of the terminal	IP00		
Shock resistance at rectangular impulse			
• at AC	10g / 5 ms, 5g / 10 ms		
Shock resistance with sine pulse			

• at AC	15g / 5 ms, 8g / 10 ms
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
• of the contactor with added electronics-	5 000 000
compatible auxiliary switch block typical	
 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	
• at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	50 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C	50 A
rated value	
— up to 690 V at ambient temperature 60 °C	45 A
rated value	
• 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
— at 110 V rated value	4.5 A

 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
	2017
 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 200 V rated value	15 kW
	18.5 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value Operating power for approx. 200000 operating cycles	10.3 KVV
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	5 000 1/h
at AC Operating frequency	
• at AC-1 maximum	1 200 1/h
• at AC-2 maximum	750 1/h
	1 000 1/h
• at AC-3 maximum	250 1/h
• at AC-4 maximum	200 1/11

Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	32 V
Control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
Operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
Apparent pick-up power of magnet coil at AC	104 V·A
Inductive power factor with closing power of the coil	0.78
Apparent holding power of magnet coil at AC	9.7 V·A
Inductive power factor with the holding power of the	0.42
coil	
Closing delay	
• at AC	11 30 ms
Opening delay	
● at AC	7 20 ms
Arcing time	10 15 ms

Auxiliary circuit	
Number of NC contacts for auxiliary contacts	
 instantaneous contact 	0
Number of NO contacts for auxiliary contacts	
 instantaneous contact 	0
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)
LIL/CSA ratings	

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		
 for short-circuit protection of the auxiliary switch 	fuse gL/gG: 10 A		
required			
Installation/ mounting/ dimensions			
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	115 mm		
Required spacing			
for grounded parts	6		
— 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		
Certificates/approvals			

General Product	Approval			Functional Safety/Safety of Machinery	Declaration of Conformity
	(SA) CSA		EHC	Type Examination Certificate	EG-Konf.
Test Certificates		Marine / Shipping			
Special Test Certi- ficate	Type Test Certific- ates/Test Report	Miscellaneous	ABS	Lloyd's Register LRS	RINA
Marine / Shippin	g	other			
RMRS	ANVELCOM/AF	Miscellaneous	Confirmation		

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=3RT1034-1AC00

Cax online generator

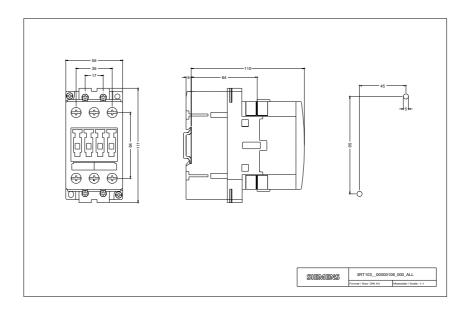
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1034-1AC00

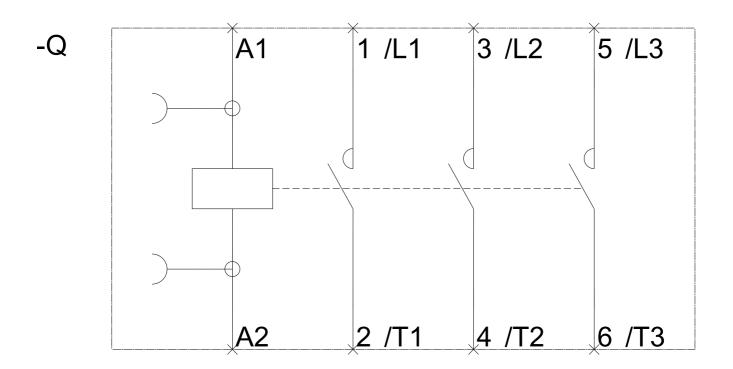
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1AC00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1034-1AC00&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1AC00/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1034-1AC00&objecttype=14&gridview=view1





last modified:

12/13/2018