SIEMENS

Data sheet

3RT1034-1AJ60

Power contactor, AC-3 32 A, 15 kW / 400 V 92 V AC, 50 Hz / 110 V, 60 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 	400 V
60947-1	
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- 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
Nain since it	
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 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 mm²
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 at 110 V rated value 25 A with 3 current paths in series at DC-1 at 24 V rated value 45 A with 3 current paths in series at DC-1 at 24 V rated value 45 A perating 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 2.5 A with 2 current paths in series at DC-3 at DC-5 at 24 V rated value 2.5 A with 2 current paths in series at DC-3 at DC-5 at 24 V rated value 2.5 A with 2 current paths in series at DC-3 at DC-5 at 24 V rated value 25 A
- at 110 V rated value25 A- at 110 V rated value45 A- at 24 V rated value45 A- at 110 V rated value45 A- at 110 V rated value35 A- at 24 V rated value35 A- at 110 V rated value2.5 A- at 24 V rated value45 A- at 110 V rated value45 A- at 24 V rated value35 A- at 110 V rated value45 A- at 110 V rated value2.5 A- at 24 V rated value45 A- at 110 V rated value45 A
 with 3 current paths in series at DC-1 at 24 V rated value at 110 V rated value 45 A 45 A 45 A 47 A 48 A 49 A<!--</td-->
- at 24 V rated value45 A- at 110 V rated value45 Aperating current45 A• at 1 current path at DC-3 at DC-5- at 24 V rated value- at 24 V rated value35 A- at 110 V rated value2.5 A• with 2 current paths in series at DC-3 at DC-545 A- at 24 V rated value45 A- at 24 V rated value2.5 A
at 110 V rated value45 Aperating current
perating current• at 1 current path at DC-3 at DC-5- at 24 V rated value35 A- at 110 V rated value2.5 A• with 2 current paths in series at DC-3 at DC-5- at 24 V rated value45 A- at 110 V rated value25 A
 at 1 current path at DC-3 at DC-5 at 24 V rated value at 110 V rated value x 35 A 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
- at 24 V rated value35 A- at 110 V rated value2.5 A• with 2 current paths in series at DC-3 at DC-5 at 24 V rated value45 A- at 110 V rated value25 A
 at 110 V rated value 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 2 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value 25 A
— at 24 V rated value45 A— at 110 V rated value25 A
— at 110 V rated value 25 A
• With 5 current paths in Series at DO-5 at DO-5
— at 24 V rated value 45 A
- at 110 V rated value 45 A
perating 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
perating power for approx. 200000 operating cycles
AC-4
• at 400 V rated value 8.2 kW
• at 690 V rated value 10 kW
hermal short-time current limited to 10 s 320 A
ower loss [W] at AC-3 at 400 V for rated value of 1.8 W
e operating current per conductor
o-load switching frequency
• at AC 5 000 1/h
perating frequency
• 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	AC
Control supply voltage at AC	
• at 50 Hz rated value	92 V
• at 60 Hz rated value	110 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
● at 60 Hz	0.8 1.1
Apparent pick-up power of magnet coil at AC	120 V·A
Inductive power factor with closing power of the coil	0.7
Apparent holding power of magnet coil at AC	10.1 V·A
Inductive power factor with the holding power of the coil	0.42
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	
Auxiliary circuit	0
Auxiliary circuit Number of NC contacts for auxiliary contacts	0
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact	0
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts	
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact	0
Auxiliary circuit Number of NC contacts for auxiliary contacts	0
Auxiliary circuit Number of NC contacts for auxiliary contacts	0 10 A
Auxiliary circuit Number of NC contacts for auxiliary contacts instantaneous contact Number of NO contacts for auxiliary contacts instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 at 230 V rated value 	0 10 A 6 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value	0 10 A 6 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value Operating current at DC-12	0 10 A 6 A 3 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 60 V rated value	0 10 A 6 A 3 A 6 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 60 V rated value • at 110 V rated value	0 10 A 6 A 3 A 6 A 3 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value	0 10 A 6 A 3 A 6 A 3 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value	0 10 A 6 A 3 A 6 A 3 A 1 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 400 V rated value • at 110 V rated value • at 220 V rated value	0 10 A 6 A 3 A 6 A 3 A 1 A 10 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 60 V rated value	0 10 A 6 A 3 A 6 A 3 A 1 A 10 A 2 A
Auxiliary circuit Number of NC contacts for auxiliary contacts • instantaneous contact Number of NO contacts for auxiliary contacts • instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 60 V rated value • at 24 V rated value • at 60 V rated value • at 110 V rated value • at 210 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value • at 24 V rated value • at 60 V rated value • at 10 V rated value • at 10 V rated value • at 10 V rated value • at 110 V rated value	0 10 A 6 A 3 A 6 A 3 A 1 A 10 A 2 A 1 A

Contact rating of auxiliary contacts according to UL	A600 / Q600
	1000 / 2000
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	
nstallation/ 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 	
— 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)
— solid — stranded	2x (0.75 16 mm²) 2x (0.75 25 mm²)
— stranded	2x (0.75 25 mm ²)
 — stranded — single or multi-stranded 	2x (0.75 25 mm²) 2x (0,75 16 mm²)
 — stranded — single or multi-stranded — finely stranded with core end processing 	2x (0.75 25 mm ²) 2x (0,75 16 mm ²) 2x (0.75 16 mm ²)
 — stranded — single or multi-stranded — finely stranded with core end processing — finely stranded without core end 	2x (0.75 25 mm ²) 2x (0,75 16 mm ²) 2x (0.75 16 mm ²)
 — stranded — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing 	2x (0.75 25 mm ²) 2x (0,75 16 mm ²) 2x (0.75 16 mm ²) 2x (0.75 16 mm ²)
 stranded single or multi-stranded finely stranded with core end processing finely stranded without core end processing at AWG conductors for main contacts 	2x (0.75 25 mm ²) 2x (0,75 16 mm ²) 2x (0.75 16 mm ²) 2x (0.75 16 mm ²)
 — stranded — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • at AWG conductors for main contacts Type of connectable conductor cross-sections	2x (0.75 25 mm ²) 2x (0,75 16 mm ²) 2x (0.75 16 mm ²) 2x (0.75 16 mm ²) 2x (18 2)
 — stranded — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • at AWG conductors for main contacts Type of connectable conductor cross-sections • for auxiliary contacts 	2x (0.75 25 mm ²) 2x (0,75 16 mm ²) 2x (0.75 16 mm ²) 2x (0.75 16 mm ²) 2x (18 2)
 stranded single or multi-stranded finely stranded with core end processing finely stranded without core end processing at AWG conductors for main contacts Type of connectable conductor cross-sections for auxiliary contacts solid 	2x (0.75 25 mm ²) 2x (0,75 16 mm ²) 2x (0.75 16 mm ²) 2x (0.75 16 mm ²) 2x (18 2) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²), max. 2x (0.75 4 mm ²)

General Product	Approval			Functional Safety/Safety of Machinery	Declaration of Conformity
	(SA) CSA		EHC	Type Examination Certificate	EG-Konf.
Test Certificates			Marine / Shippir	ng	
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=3RT1034-1AJ60

Cax online generator

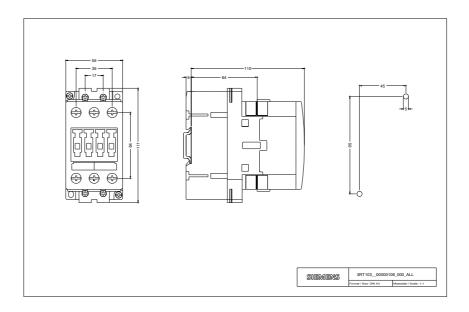
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1034-1AJ60

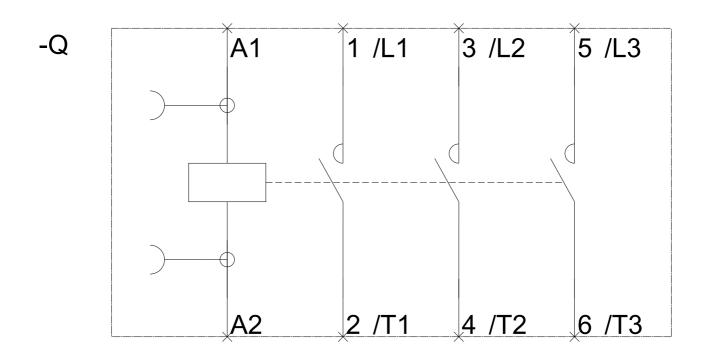
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1AJ60

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1034-1AJ60&lang=en_____

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1AJ60/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1034-1AJ60&objecttype=14&gridview=view1





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