SIEMENS

Data sheet 3RT1034-1AK60



CONTACTOR, AC-3 15 KW/400 V, AC 110V 50HZ/120V 60HZ 3-POLE, SIZE S2, SCREW CONNECTION $\,$

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
Mechanical service life (switching cycles)	
 of the 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 	10 000 000
block typical	
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
during operation	-25 +60 °C

during storage	-55 +80 °C

Main circuit:	
Number of poles for main current circuit	3
Number of NC contacts for main contacts	0
Number of NO contacts for main contacts	3
Connectable conductor cross-section in main circuit	
at AC-1	
 at 60 °C minimum permissible 	10 mm²
 at 40 °C minimum permissible 	16 mm²
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
— 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
Operating current for ≥ 200000 operating cycles at	
AC-4	
● at 400 V Rated value	15.6 A
● at 690 V Rated value	11 A
Operating current	
with 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	
with 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 110 V Rated value	25 A
— at 24 V Rated value	45 A
• with 3 current paths in series at DC-3 at DC-5	

— at 110 V Rated value	45 A
— at 24 V Rated value	45 A
Operating power	
• at AC-1	
— at 230 V at 60 °C Rated value	18 kW
— at 690 V at 60 °C Rated value	54 kW
Operating power for ≥ 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 restricted to 10 s	320 A
Active power loss at AC-3 at 400 V for rated value of	1.8 W
the operating current per conductor	
No-load switching frequency	
• with AC	5 000 1/h
Operating 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 with AC	
• at 50 Hz Rated value	110 V
• at 60 Hz Rated value	120 V
Rated value	50 Hz
Control supply voltage frequency 2 Rated value	60 Hz
Operating range factor control supply voltage rated value of the magnet coil with AC	
● at 50 Hz	0.8 1.1
• at 60 Hz	0.8 1.1
Apparent pick-up power of the magnet coil with AC	120 V·A
Inductive power factor with closing power of the coil	0.7
Apparent holding power of the magnet coil with AC	10.1 V·A
Inductive power factor with the holding power of the coil	0.42
Closing delay	
• with AC	11 30 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 the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings:

Contact rating of the auxiliary contacts acc. to UL

A600 / Q600

fuse gL/gG: 10 A

Design of the fuse link

• for short-circuit protection of the main circuit

fuse gL/gG: 125 A - with type of assignment 1 required fuse gL/gG: 63 A — with type of assignment 2 required

• for short-circuit protection of the auxiliary switch

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	
— at the side	6 mm

Type of electrical connecti	on
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screw-type terminals • for main current circuit • for auxiliary and control current circuit screw-type terminals

Type of connectable conductor cross-section

• for main contacts

2x (0.75 ... 16 mm²) - solid

2x (0.75 ... 25 mm²) - stranded

2x (0,75 ... 16 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 (18 ... 2) • for AWG conductors for main contacts

Type of connectable conductor cross-section

• for auxiliary contacts

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

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) - finely stranded with core end processing

2x (20 ... 16), 2x (18 ... 14), 1x 12 • for AWG conductors for auxiliary contacts

Certificates/ approvals:

General Product Approval Declaration of Functional Test Safety/Safety Conformity Certificates of Machinery







Type Examination



Type Test Certificates/Test Report

ı e	St	
Ce	rtificates	

Shipping Approval

Special Test Certificate











Shipping Approval

other



Environmental Confirmations

Confirmation

other

Further information

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

Industry Mall (Online ordering system)

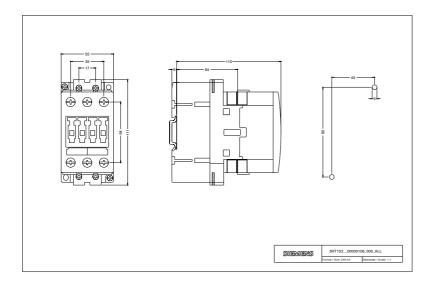
http://www.siemens.com/industrymall

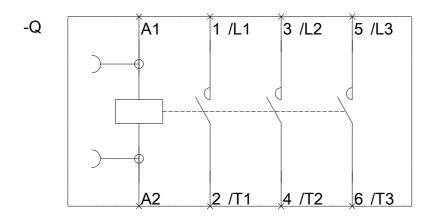
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10341AK60

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT10341AK60

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10341AK60&lang=en





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