SIEMENS

Data sheet 3RT1015-1AK61

Figure similar

CONTACTOR, AC-3 3 KW/400 V, 1 NO, AC 110V 50/ 120V 60 HZ 3-POLE, SIZE S00, SCREW CONNECTION

product brand name	SIRIUS
Product designation	power contactor

General technical data:	
Size of contactor	S00
Degree of pollution	3
Mechanical service life (switching cycles)	
• of the 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
Protection class IP	
• on the front	IP20
• of the terminal	IP20
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 maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °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
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C Rated value	18 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C Rated value	18 A
— at ambient temperature 60 °C Rated value	16 A
• at AC-3	
— at 400 V Rated value	7 A
• at AC-4 at 400 V Rated value	6.5 A
Operating current	
• with 1 current path at DC-1	
— at 24 V Rated value	15 A
— at 110 V Rated value	1.5 A
• with 2 current paths in series at DC-1	
— at 24 V Rated value	15 A
— at 110 V Rated value	8.4 A
• with 3 current paths in series at DC-1	
— at 24 V Rated value	15 A
— at 110 V Rated value	15 A
Operating current	
• with 1 current path at DC-3 at DC-5	
— at 24 V Rated value	15 A
— at 110 V Rated value	0.1 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	0.25 A
— at 24 V Rated value	15 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	15 A
— at 24 V Rated value	15 A
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor	0.42 W

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	0.85 ... 1.1

• at 60 Hz	0.8 ... 1.1
Apparent pick-up power of the magnet coil with AC	31.7 V·A
Inductive power factor with closing power of the coil	0.77
Apparent holding power of the magnet coil with AC	5.1 V·A
Inductive power factor with the holding power of the coil	0.27

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 the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

Short-circuit:

Design of the fuse link	
• for short-circuit protection of the main circuit	
— with type of assignment 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

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	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-section	
• 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)
• for AWG conductors for main contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12
Type of connectable conductor cross-section	
• 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)
• for 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
CSA	UL	UR	EAC	Type Examination	EG-Konf.

Test Certificates	Shipping Approval				
Special Test Certificate	ABS	DNV	GL	LRS	PRS

Shipping Approval		other		
RINA	RMRS	Environmental Confirmations	Confirmation	other

Further information

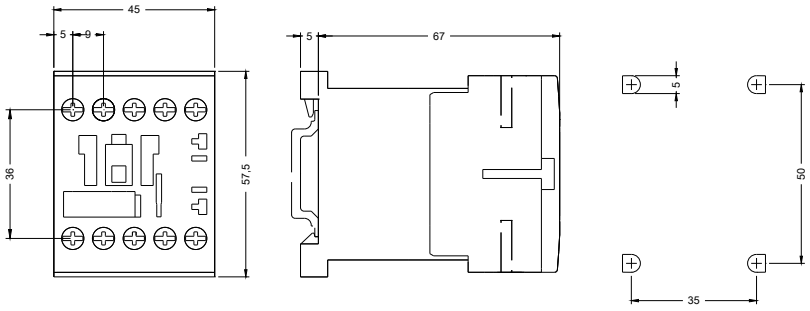
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

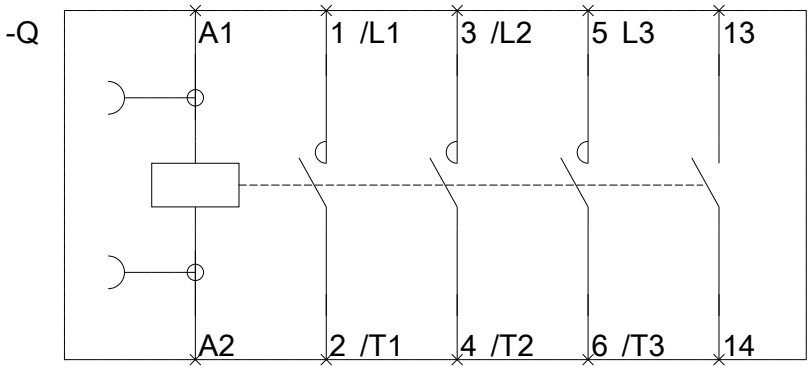
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10151AK61

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RT10151AK61

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10151AK61&lang=en





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