SIEMENS

Data sheet 3RT1025-1AK60

CONTACTOR, AC-3 7,5 KW/400 V, AC 110V 50HZ/120V 60HZ, 3-POLE, SIZE S0, SCREW CONNECTION

Figure similar

Product brand name	SIRIUS
Product designation	power contactor

General technical data

Size of contactor	S0
Degree of pollution	3
Protection class IP	
• on the front	IP20
• of the terminal	IP20
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

Ambient conditions

Ambient temperature	
• during operation	-25 ... +60 °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	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	40 A
— up to 690 V at ambient temperature 60 °C rated value	35 A
• at AC-3	
— at 400 V rated value	17 A
• at AC-4 at 400 V rated value	15.5 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	4.5 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 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	35 A
— at 110 V rated value	15 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
Operating power	
• at AC-1	
— at 400 V rated value	23 kW
• at AC-2 at 400 V rated value	7.5 kW
• **at AC-3**	
— at 400 V rated value	7.5 kW
— at 500 V rated value	10 kW

— at 690 V rated value	11 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.9 W

Control circuit/ Control

Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	110 V
• at 60 Hz rated value	120 V
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	69 V·A
Inductive power factor with closing power of the coil	0.76
Apparent holding power of magnet coil at AC	7.5 V·A
Inductive power factor with the holding power of the coil	0.28

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)

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: 63 A
— with type of assignment 2 required	fuse gL/gG: 25 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	85 mm
Width	45 mm
Depth	91 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 (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), max. 2x 10 mm²
— single or multi-stranded	2x (1 ... 2,5 mm²), 2x (2,5 ... 6 mm²), max. 2x 10 mm²
— finely stranded with core end processing	2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²)
• at AWG conductors for main contacts	2x (16 ... 12), 2x (14 ... 10), 1x 8
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	Test Certificates
CCC	CSA	EAC	Type Examination Certificate	EG-Konf.	Special Test Certificate

Test Certificates	Marine / Shipping				
Type Test Certificates/Test Report	ABS	LRS	RINA	RMRS	DNV

Marine / Shipping	other		
	Miscellaneous	Confirmation	Environmental Confirmations

Further information

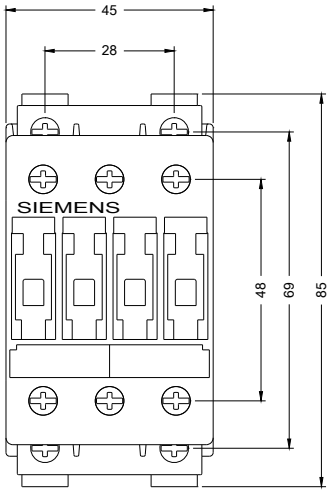
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

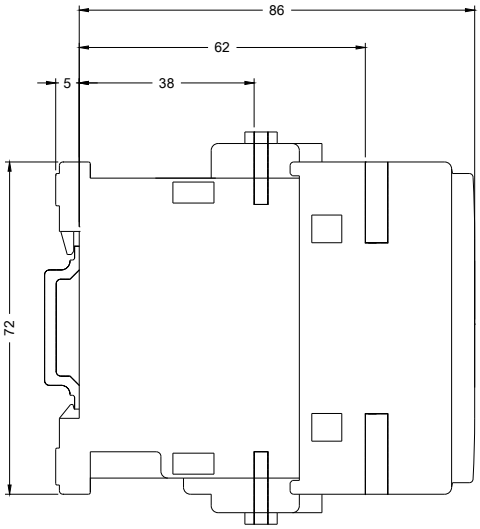
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1025-1AK60

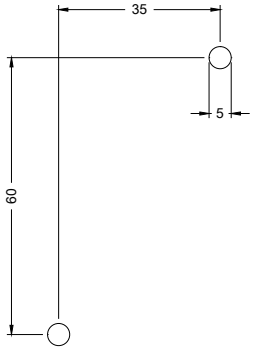
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1025-1AK60

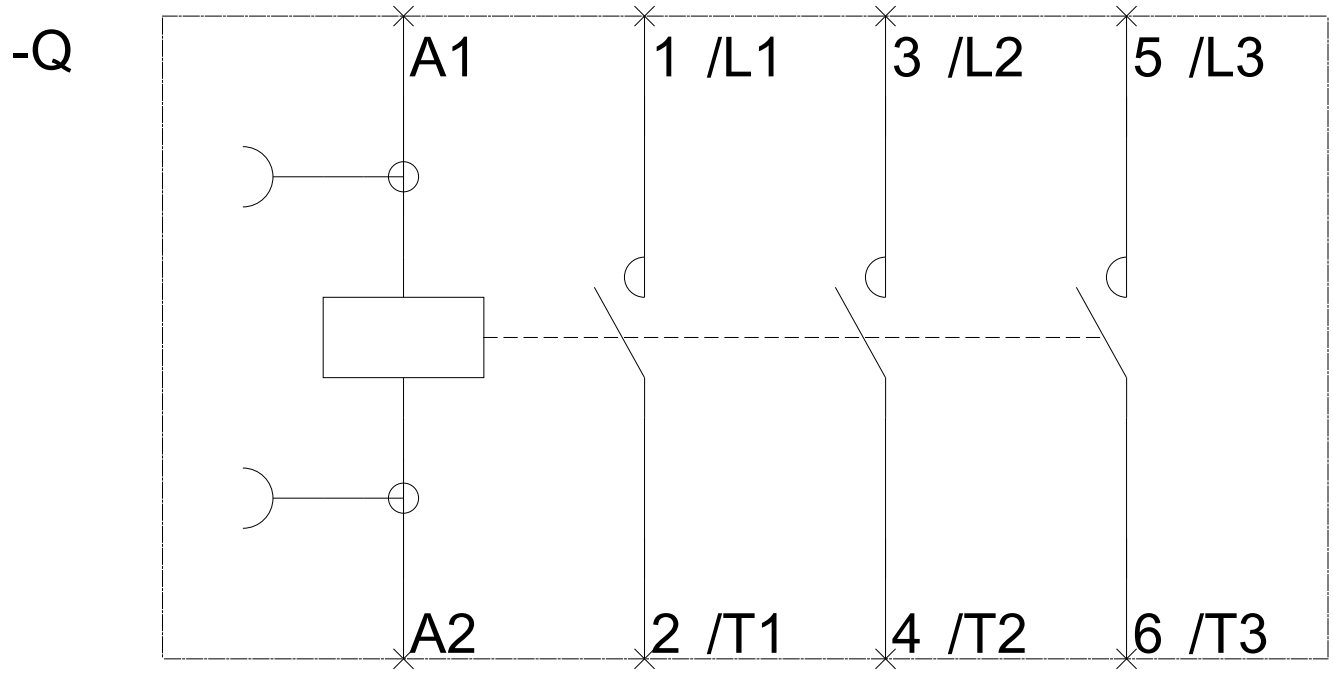
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RT1025-1AK60

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1025-1AK60&lang=en









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