SIEMENS

Data sheet 3RT1024-3AK60

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



Figure similar

product brandname	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	
Installation altitude at height above sea level maximum	2 000 m

Ambient temperature	
during operation	-25 +60 °C
Aain 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	12 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 110 V rated value	15 A
— at 24 V rated value	35 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	35 A
— at 24 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	5.5 kW
● at AC-3	

— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
Power loss [W] at AC-3 at 400 V for rated value of	0.5 W
the operating current per conductor	

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
Control supply voltage frequency 1 rated value	50 Hz
Control supply voltage frequency 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	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

— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

fuse gL/gG: 63 A

fuse gL/gG: 25 A

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	90 mm	
Required spacing		
 for grounded parts 		
— at the side	6 mm	

Connections/Terminals

Type of electrical	connection
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• for main current circuit

• for auxiliary and control current circuit

screw-type terminals

spring-loaded terminals

Type of connectable conductor cross-sections

• for main contacts

- single or multi-stranded

- finely stranded with core end processing

• at AWG conductors for main contacts

2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), max. 2x 10 mm²

 $2x\ (1\ ...\ 2,5\ mm^2),\ 2x\ (2,5\ ...\ 6\ mm^2),\ max.\ 2x\ 10\ mm^2$

2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²)

2x (16 ... 12), 2x (14 ... 10), 1x 8

Type of connectable conductor cross-sections

for auxiliary contacts

— solid

— finely stranded with core end processing

finely stranded without core end processing

• at AWG conductors for auxiliary contacts

2x (0.25 ... 2.5 mm²)

2x (0.25 ... 1.5 mm²)

2x (0.25 ... 2.5 mm²)

2x (24 ... 14)

Certificates/approvals

General Product Approval

Declaration of Conformity

Test Certificates









Typprüfbescheinigu ng/Werkszeugnis

<u>spezielle</u> Prüfbescheinigunge

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Shipping Approval













other

Bestätigungen

Umweltbestätigung

sonstig

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=3RT1024-3AK60

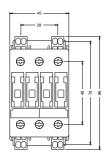
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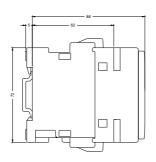
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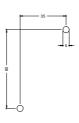
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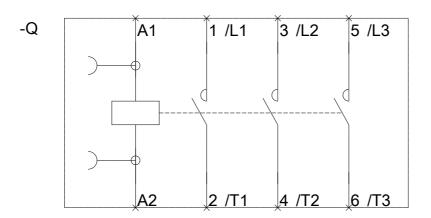
 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RT1024-3AK60}}$

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1024-3AK60&lang=en









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