

CONTACTOR, AC-3 4 KW/400 V, AC-1 18 A, AC 110V 50HZ/120V
60HZ 4-POLE, 2 NO + 2 NC, SIZE S00, SCREW CONNECTION



Figure similar

product brandname	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S00
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Protection class IP	
• on the front	IP20
Mechanical service life (switching cycles)	
• of 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
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
Main circuit	
Number of poles for main current circuit	4
Number of NO contacts for main contacts	2
Number of NC contacts for main contacts	2
Operating current	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	18 A
— up to 690 V at ambient temperature 60 °C rated value	16 A
• at AC-2 at AC-3 at 400 V	
— per NO contact rated value	9 A
— per NC contact rated value	9 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	2.5 mm ²
• at 40 °C minimum permissible	2.5 mm ²
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	16 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	16 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V per NC contact rated value	16 A
— at 24 V per NO contact rated value	16 A
— at 110 V per NC contact rated value	0.075 A
— at 110 V per NO contact rated value	0.15 A
— at 220 V per NC contact rated value	0.375 A
— at 220 V per NO contact rated value	0.75 A
• with 2 current paths in series at DC-3 at DC-5	

— at 110 V per NC contact rated value	0.175 A
— at 110 V per NO contact rated value	0.35 A
— at 24 V per NC contact rated value	16 A
— at 24 V per NO contact rated value	16 A
Operating power	
• at AC-1	
— at 230 V rated value	6.5 kW
— at 400 V rated value	11 kW
• at AC-2 at AC-3	
— at 230 V per NC contact rated value	3 kW
— at 230 V per NO contact rated value	3 kW
— at 400 V per NC contact rated value	4 kW
— at 400 V per NO contact rated value	4 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.7 W
Operating frequency	
• at AC-1 maximum	1 000 1/h
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	0.85 ... 1.1
Apparent pick-up power of magnet coil at AC	31.7 V·A
• at 50 Hz	31.7 V·A
Inductive power factor with closing power of the coil	0.77
• at 50 Hz	0.77
Apparent holding power of magnet coil at AC	5.1 V·A
• at 50 Hz	5.1 V·A
Inductive power factor with the holding power of the coil	0.27
• at 60 Hz	0.27
Closing delay	
• at AC	8 ... 35 ms
• at DC	25 ... 100 ms
Opening delay	
• at AC	4 ... 30 ms
• at DC	7 ... 10 ms
Arcing time	10 ... 15 ms

Control version of the switch operating mechanism	conventional
Residual current of the electronics for control with signal <0>	
<ul style="list-style-type: none"> • at AC at 230 V maximum permissible 	0.003 A

Auxiliary circuit

Number of NC contacts	
<ul style="list-style-type: none"> • for auxiliary contacts — instantaneous contact 	0
Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts — instantaneous contact 	0
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
<ul style="list-style-type: none"> • at 230 V rated value • at 400 V rated value 	6 A 3 A
Operating current at DC-12	
<ul style="list-style-type: none"> • at 60 V rated value • at 110 V rated value • at 220 V rated value 	6 A 3 A 1 A
Operating current at DC-13	
<ul style="list-style-type: none"> • at 24 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value 	10 A 2 A 1 A 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	
<ul style="list-style-type: none"> • 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: 35 A fuse gL/gG: 20 A fuse gL/gG: 10 A

Installation/ mounting/ dimensions

Mounting position	with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<ul style="list-style-type: none"> • 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
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

Type of connectable conductor cross-sections

- for main contacts
 - solid
 - single or multi-stranded
 - finely stranded with core end processing
- at AWG conductors for main contacts

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

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), max. 2x (0,75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

Type of connectable conductor cross-sections

- for auxiliary contacts
 - solid
 - single or multi-stranded
 - finely stranded with core end processing
- at AWG conductors for auxiliary contacts

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

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2x (20 ... 16), 2x (18 ... 14), 1x 12

Safety related data

Failure rate [FIT]

- with low demand rate acc. to SN 31920

100 FIT

Certificates/approvals

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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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=3RT1516-1AK60>

Cax online generator

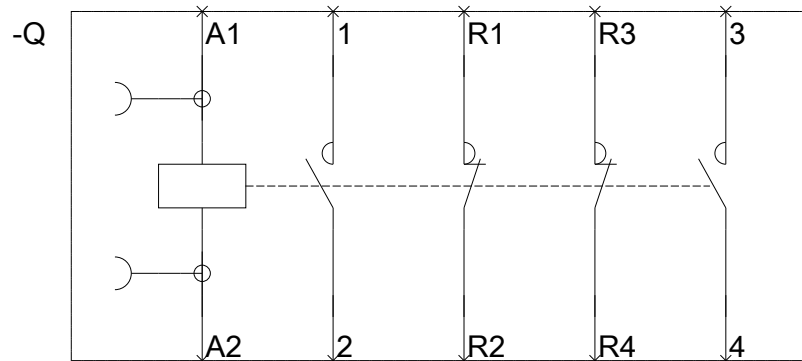
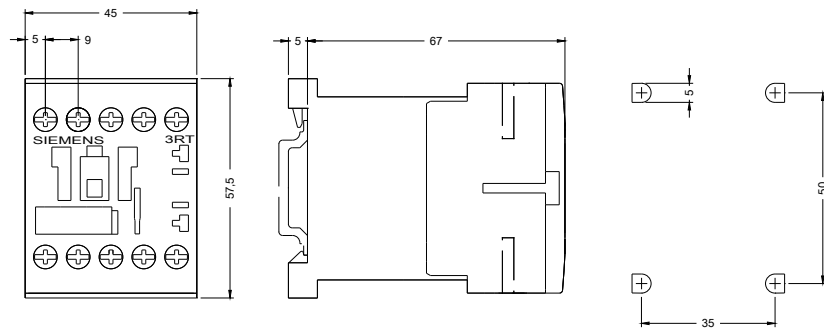
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1516-1AK60>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1516-1AK60>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1516-1AK60&lang=en



last modified:

12/18/2016