

power contactor, AC-3 12 A, 5.5 kW / 400 V 1 NC, 110 V DC 3-pole,
Size S00 screw terminal



Figure similar

Product brand name	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S00
Degree of pollution	3
Protection class IP	
• on the front	IP20
• of the terminal	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
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	22 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	22 A
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-3	
— at 400 V rated value	12 A
• at AC-4 at 400 V rated value	8.5 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	20 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	0.15 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
Operating power	
• at AC-1	
— at 400 V rated value	13 kW
• at AC-2 at 400 V rated value	5.5 kW

• at AC-3 — at 400 V rated value — at 500 V rated value — at 690 V rated value	5.5 kW 5.5 kW 5.5 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	1.24 W

Control circuit/ Control	
Type of voltage of the control supply voltage	DC
Control supply voltage at DC • rated value	110 V
Operating range factor control supply voltage rated value of magnet coil at DC • initial value • Full-scale value	0.85 1.1
Closing power of magnet coil at DC	3.3 W
Holding power of magnet coil at DC	3.3 W

Auxiliary circuit	
Number of NC contacts • for auxiliary contacts — instantaneous contact	1
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 • at 400 V rated value	6 A 3 A
Operating current at DC-12 • 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 • 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 • for short-circuit protection of the main circuit — with type of coordination 1 required	fuse gL/gG: 35 A

- with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

fuse gL/gG: 20 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	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-sections	
• for main contacts	
— solid	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²)
— single or multi-stranded	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• at AWG conductors for main contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12
Type of connectable conductor cross-sections	
• for auxiliary contacts	
— solid	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• 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
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[Type Examination Certificate](#)



Test Certificates	Marine / Shipping
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[Special Test Certificate](#)



ABS



LRS



PRS



RINA



RMRS

Marine / Shipping	other
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[Confirmation](#)

[Miscellaneous](#)

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=3RT1017-1BF42>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1017-1BF42>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1017-1BF42>

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

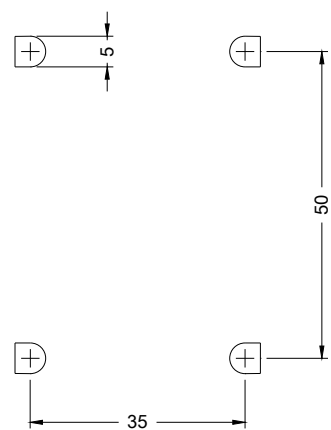
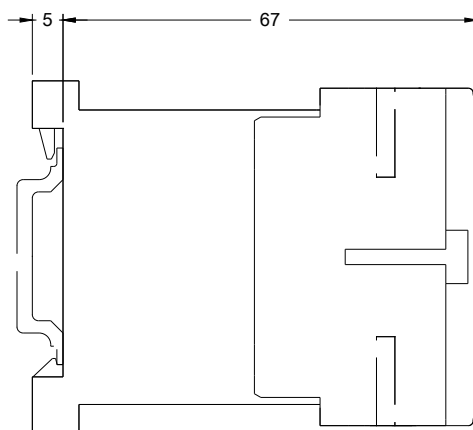
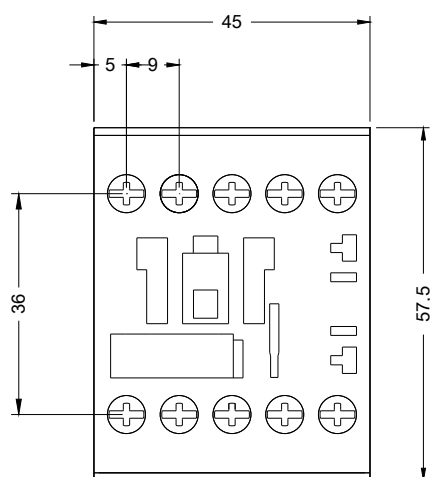
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1017-1BF42&lang=en

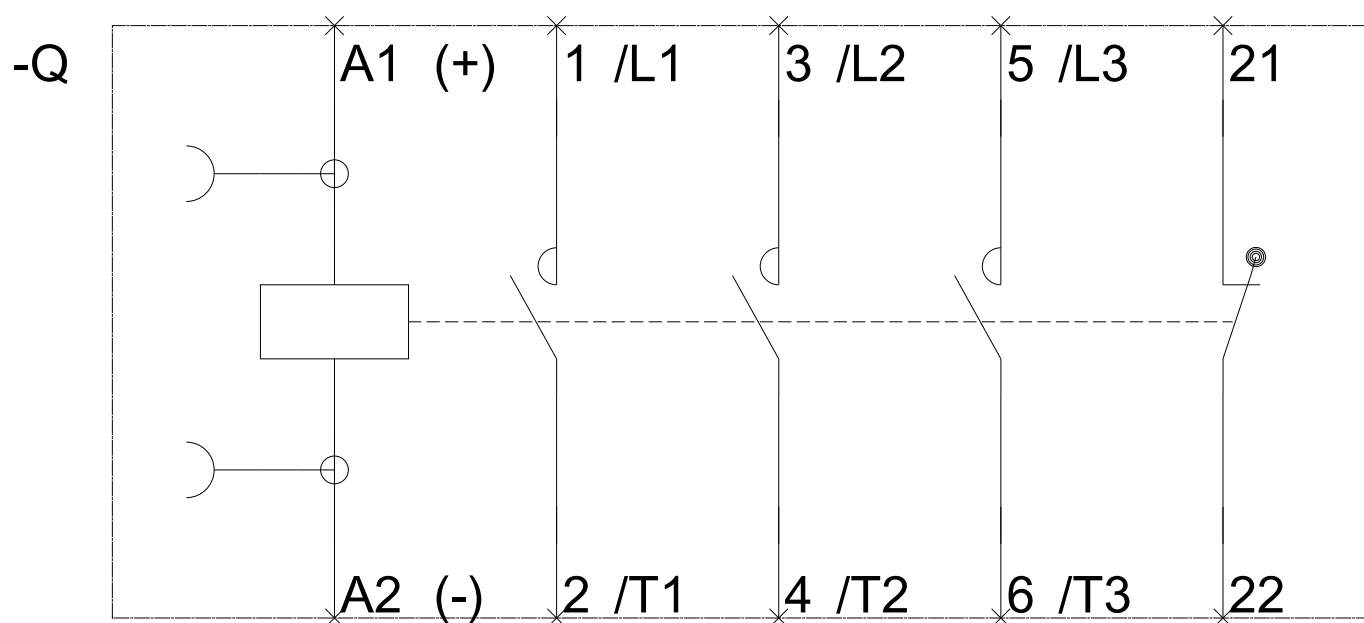
Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1017-1BF42/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1017-1BF42&objecttype=14&gridview=view1>





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