

Power contactor, AC-3 12 A, 5.5 kW / 400 V 24 V AC, 50/60 Hz 3-pole, Size S0 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2024-1AC20<<



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	IP00
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
Reference code 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 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 • at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value • at AC-3 — at 400 V rated value • at AC-4 at 400 V rated value	40 A 40 A 35 A 12 A 12.5 A
Operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value	35 A 4.5 A 35 A 35 A 35 A 35 A
Operating current • at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value • with 3 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value	20 A 2.5 A 35 A 15 A 35 A 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 the operating current per conductor	0.5 W

Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
Control supply voltage frequency	
• 1 rated value	50 Hz
• 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	0.85 ... 1.1
Apparent pick-up power of magnet coil at AC	64 V·A
Inductive power factor with closing power of the coil	0.72
Apparent holding power of magnet coil at AC	8.4 V·A
Inductive power factor with the holding power of the coil	0.24

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	91 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 (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), max. 2x 10 mm ² 2x (1 ... 2,5 mm ²), 2x (2,5 ... 6 mm ²), max. 2x 10 mm ² 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²) 2x (16 ... 12), 2x (14 ... 10), 1x 8
Type of connectable conductor cross-sections	
- for auxiliary contacts — solid — finely stranded with core end processing - at AWG conductors for auxiliary contacts	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 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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CCC



CSA



UL



[Type Examination Certificate](#)



EG-Konf.

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

[Type Test Certificates/Test Report](#)



ABS



LRS



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=3RT1024-1AC20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1024-1AC20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1024-1AC20>

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

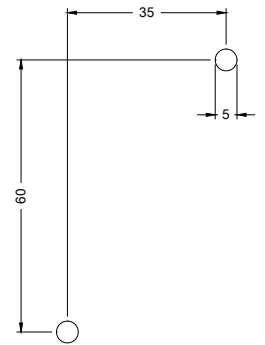
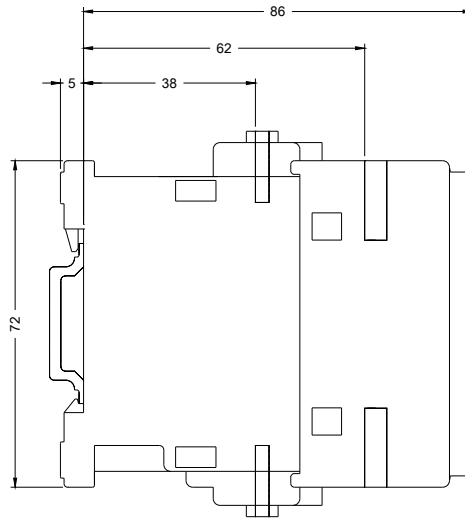
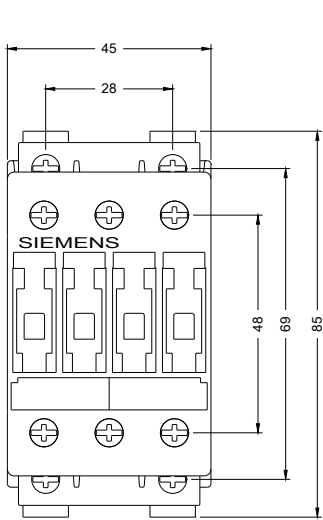
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1024-1AC20&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

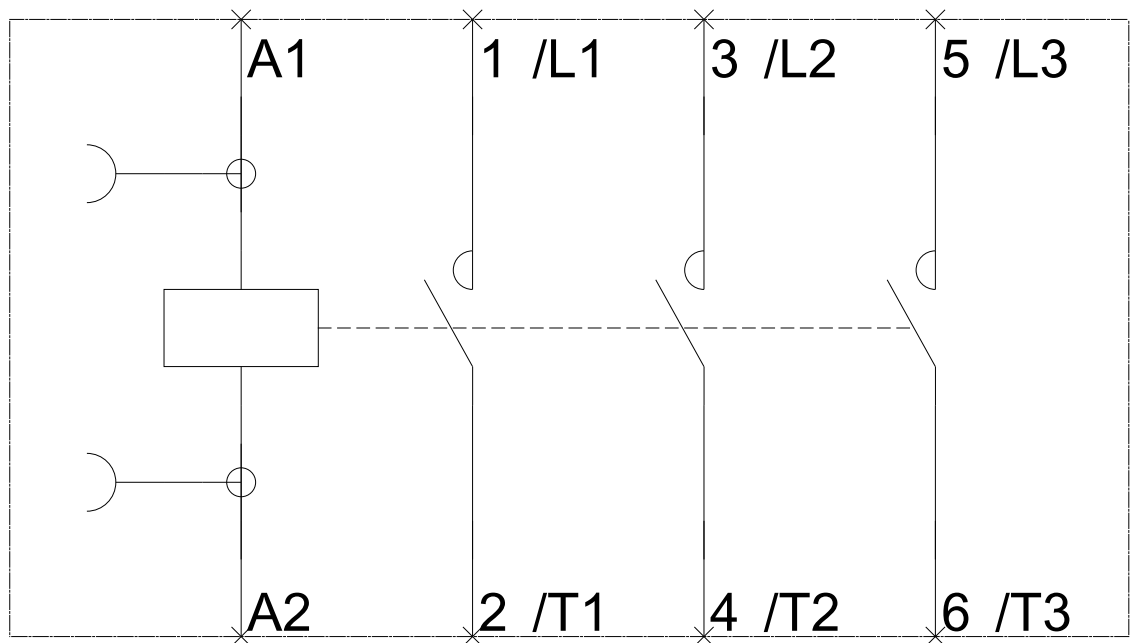
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1024-1AC20/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1024-1AC20&objecttype=14&gridview=view1>



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07/25/2018