

CONTACTOR, AC-3 30 KW/400 V, DC 24 V, 3-POLE, SIZE S3,
SCREW CONNECTION



Figure similar

product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	S3
Insulation voltage	
• rated value	1 000 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• between coil and main contacts acc. to EN 60947-1	690 V
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Shock resistance	
• at rectangular impulse	
— at DC	6,8g / 5 ms, 4g / 10 ms
• with sine pulse	
— at DC	10,6g / 5 ms, 6,2g / 10 ms

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
• during storage	-55 ... +80 °C
Main circuit:	
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	100 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	100 A
— at ambient temperature 60 °C rated value	90 A
• at AC-3	
— at 400 V rated value	65 A
— at 690 V rated value	47 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	35 mm²
• at 40 °C minimum permissible	35 mm²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	28 A
• at 690 V rated value	20 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	90 A
— at 110 V rated value	4.5 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	90 A
— at 110 V rated value	90 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	90 A
— at 110 V rated value	90 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 110 V rated value — at 24 V rated value • with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value — at 24 V rated value	40 A 2.5 A 90 A 90 A 90 A 90 A
Operating power	
• at AC-1 — at 230 V at 60 °C rated value — at 400 V rated value — at 690 V rated value — at 690 V at 60 °C rated value • at AC-2 at 400 V rated value • at AC-3 — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value	34 kW 59 kW 102 kW 102 kW 30 kW 18.5 kW 30 kW 37 kW 45 kW
Operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value • at 690 V rated value	15.1 kW 18.6 kW
Thermal short-time current limited to 10 s	600 A
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	4.6 W
No-load switching frequency	
• at DC	1 000 1/h
Operating frequency	
• at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum	1 000 1/h 400 1/h 1 000 1/h 300 1/h
Control circuit/ Control:	
Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
• rated value	24 V
Operating range factor control supply voltage rated value of magnet coil at DC	0.8 ... 1.1

Closing power of magnet coil at DC	15 W
Holding power of magnet coil at DC	15 W
Closing delay	
• at DC	90 ... 230 ms
Opening delay	
• at DC	14 ... 20 ms
Arcing time	10 ... 15 ms

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)

UL/CSA ratings:

Contact rating of auxiliary contacts according to UL	A600 / Q600
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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: 250 A
— with type of assignment 2 required	fuse gL/gG: 125 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 and 75 mm standard mounting rail
• Side-by-side mounting	Yes

Height	146 mm
Width	70 mm
Depth	152 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 — stranded — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • at AWG conductors for main contacts	2x (2.5 ... 16 mm ²) 2x (10 ... 50 mm ²) 2x (2,5 ... 16 mm ²) 2x (2.5 ... 35 mm ²) 2x (10 ... 35 mm ²) 2x (10 ... 1/0)
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				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	Typprüfbescheinigung/Werkszeugnis

Test Certificates	Shipping Approval				
spezielle Prüfbescheinigungen	sonstig	 ABS	 GL	 LRS	 RINA

Shipping Approval	other				
 RMRS	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=3RT10441BB40>

Cax online generator

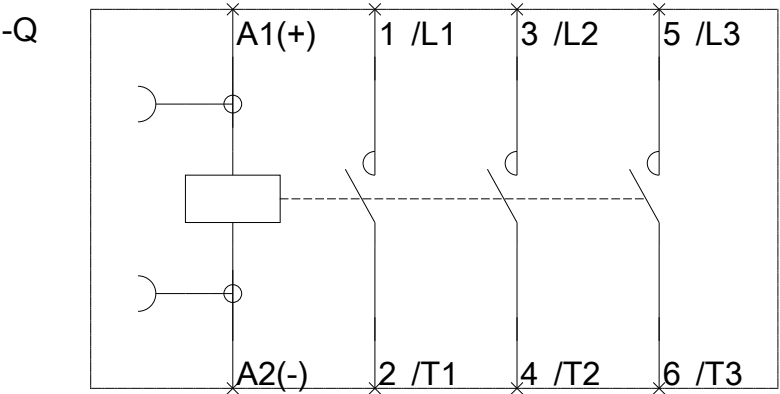
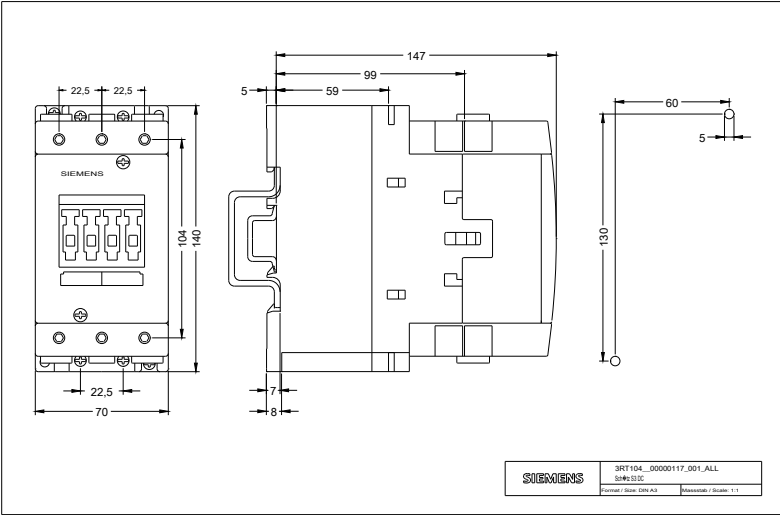
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10441BB40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10441BB40>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10441BB40&lang=en



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