SIEMENS

Data sheet 3RT1076-6LA06

CONTACTOR, 250KW/400V/AC-3 WITHOUT COIL AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S12 RAIL CONNECTIONS



Figure similar

Product brand name	SIRIUS
Product designation	Power contactor
Product type designation	3RT1

General technical data	
Size of contactor	S12
Product extension	
 function module for communication 	No
Auxiliary switch	Yes
Insulation voltage	
• rated value	1 000 V
Degree of pollution	3
Surge voltage resistance rated value	8 kV
maximum permissible voltage for safe isolation	
 between coil and main contacts acc. to EN 	690 V
60947-1	
Protection class IP	
• on the front	IP00

• of the terminal	IP00
of the terminal Shock resistance at rectangular impulse	11 00
• at AC	8,5g / 5 ms, 4,2g / 10 ms
• at DC	8,5g / 5 ms, 4,2g / 10 ms
	0,39 / 3 1115, 4,29 / 10 1115
Shock resistance with sine pulse	13,4g / 5 ms, 6,5g / 10 ms
• at AC	
• at DC	13,4g / 5 ms, 6,5g / 10 ms
Mechanical service life (switching cycles)	40,000,000
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	
Ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
Main circuit	
Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
Operating voltage	
 at AC-3 rated value maximum 	1 000 V
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	610 A
• at AC-1	
 up to 690 V at ambient temperature 40 °C rated value 	610 A
— up to 690 V at ambient temperature 60 °C rated value	550 A
— up to 1000 V at ambient temperature 40 °C rated value	200 A
— up to 1000 V at ambient temperature 60 °C rated value	200 A
• at AC-2 at 400 V rated value	500 A
• at AC-3	
— at 400 V rated value	500 A
— at 500 V rated value	500 A
— at 690 V rated value	450 A
— at 1000 V rated value	180 A
Connectable conductor cross-section in main circuit	
at AC-1	
•	

• at 60 °C minimum permissible	370 mm²
• at 40 °C minimum permissible	370 mm²
Operating current for approx. 200000 operating	
cycles at AC-4	
• at 400 V rated value	175 A
• at 690 V rated value	150 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	400 A
— at 110 V rated value	33 A
— at 220 V rated value	3.8 A
— at 440 V rated value	0.9 A
— at 600 V rated value	0.6 A
with 2 current paths in series at DC-1	
— at 24 V rated value	400 A
— at 110 V rated value	400 A
— at 220 V rated value	400 A
— at 440 V rated value	4 A
— at 600 V rated value	2 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	400 A
— at 110 V rated value	400 A
— at 220 V rated value	400 A
— at 440 V rated value	11 A
— at 600 V rated value	5.2 A
Operating current	
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	400 A
— at 110 V rated value	3 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.18 A
— at 600 V rated value	0.125 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	400 A
— at 110 V rated value	400 A
— at 220 V rated value	2.5 A
— at 440 V rated value	0.65 A
— at 600 V rated value	0.37 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	400 A
— at 110 V rated value	400 A

— at 220 V rated value	400 A
— at 440 V rated value	1.4 A
— at 600 V rated value	0.75 A
Operating power	
• at AC-1	
— at 230 V at 60 °C rated value	208 kW
— at 400 V rated value	362 kW
— at 400 V at 60 °C rated value	362 kW
— at 690 V rated value	624 kW
— at 690 V at 60 °C rated value	624 kW
— at 1000 V at 60 °C rated value	329 kW
• at AC-2 at 400 V rated value	250 kW
● at AC-3	
— at 230 V rated value	164 kW
— at 400 V rated value	250 kW
— at 500 V rated value	315 kW
— at 690 V rated value	400 kW
— at 1000 V rated value	250 kW
Operating power for approx. 200000 operating cycles	
at AC-4	
• at 400 V rated value	98 kW
• at 690 V rated value	148 kW
Thermal short-time current limited to 10 s	4 000 A
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	55 W
No-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
Operating frequency	
• at AC-1 maximum	500 1/h
at AC-2 maximum	170 1/h
• at AC-3 maximum	420 1/h
● at AC-4 maximum	130 1/h
Control circuit/ Control	
Type of voltage of the control supply voltage	AC/DC
Closing delay	
• at AC	45 100 ms
• at DC	45 100 ms
Opening delay	
• at AC	60 100 ms
• at DC	60 100 ms
Arcing time	10 15 ms

Number of NC contacts • for auxiliary contacts — instantaneous contact 2 Number of NO contacts • for auxiliary contacts — instantaneous contact 2 Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 800 V rated value • at 800 V rated value • at 800 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 48 V rated value • at 600 V rated value •	Auxiliary circuit	
Instantaneous contacts 2		
Number of NO contacts • for auxiliary contacts — instantaneous contact 2 Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value 1 A Operating current at DC-12 • at 24 V rated value • at 8 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 125 V rated value • at 125 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 6	• for auxiliary contacts	
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— instantaneous contact 2 Operating current at AC-12 maximum 10 A Operating current at AC-15	Number of NO contacts	
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at 220 V rated value at 600 V rated value 0.15 A Operating current at DC-13 at 24 V rated value 10 A at 48 V rated value at 60 V rated value at 60 V rated value 1 A at 110 V rated value 1 A at 125 V rated value at 125 V rated value at 200 V rated value 1 A at 200 V rated value 1 A at 210 V rated va	• at 110 V rated value	3 A
at 600 V rated value Operating current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 200 V rated value at 600 V rated val	• at 125 V rated value	2 A
Operating current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value	• at 220 V rated value	1 A
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 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 1 A 0.9 A at 600 V rated value 0.1 A Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings 	● at 48 V rated value	2 A
 at 125 V rated value at 220 V rated value at 600 V rated value O.1 A Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings	• at 60 V rated value	2 A
 at 220 V rated value at 600 V rated value Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings	• at 110 V rated value	1 A
• at 600 V rated value Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings	• at 125 V rated value	0.9 A
Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings	• at 220 V rated value	0.3 A
UL/CSA ratings	• at 600 V rated value	0.1 A
	Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Full band comment (FLA) for the complete A Complete	UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value 477 A	● at 480 V rated value	477 A
• at 600 V rated value 472 A	● at 600 V rated value	472 A
Yielded mechanical performance [hp]	Yielded mechanical performance [hp]	
• for three-phase AC motor	• for three-phase AC motor	
— at 200/208 V rated value 150 hp	— at 200/208 V rated value	150 hp
— at 220/230 V rated value 200 hp	— at 220/230 V rated value	200 hp
— at 460/480 V rated value 400 hp	— at 460/480 V rated value	400 hp
— at 575/600 V rated value 500 hp	— at 575/600 V rated value	500 hp
Contact rating of auxiliary contacts according to UL A600 / Q600	Contact rating of auxiliary contacts according to UL	A600 / Q600

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 gG: 630 A

Fuse gG: 500 A

fuse gG: 10 A

Mounting position	+/-180° rotation possible on vertical mounting surface; can be
	tilted forward and backward by +/- 22.5° on vertical mounting
	surface
Mounting type	screw fixing
 Side-by-side mounting 	Yes
Height	214 mm
Width	160 mm
Depth	225 mm
Required spacing	
for grounded parts	
— at the side	10 mm

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	

• at AWG conductors for main contacts Type of connectable conductor cross-sections

• for auxiliary contacts

Connections/Terminals

— solid
 — single or multi-stranded
 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)
 — single or multi-stranded
 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), max. 2x (0,75 ... 4 mm²)

2/0 ... 500 kcmil

— finely stranded with core end processing 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

• at AWG conductors for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14), 1x 12

Safety related data

Product function

Mirror contact acc. to IEC 60947-4-1

• positively driven operation acc. to IEC 60947-5-

1

Yes

No

Protection against electrical shock

finger-safe when touched vertically from front acc. to IEC 60529

Certificates/approvals

General Product Approval

Functional Safety/Safety of Machinery

Declaration of Conformity





ABS



RMRS



Type Examination Certificate



Test	Marine / Shipping		other	other	
Certificates					
Special Test Certificate	ARS	RMRS	DNV-GL DNV-GL	Miscellaneous	Confirmation

other

Environmental Confirmations

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=3RT1076-6LA06

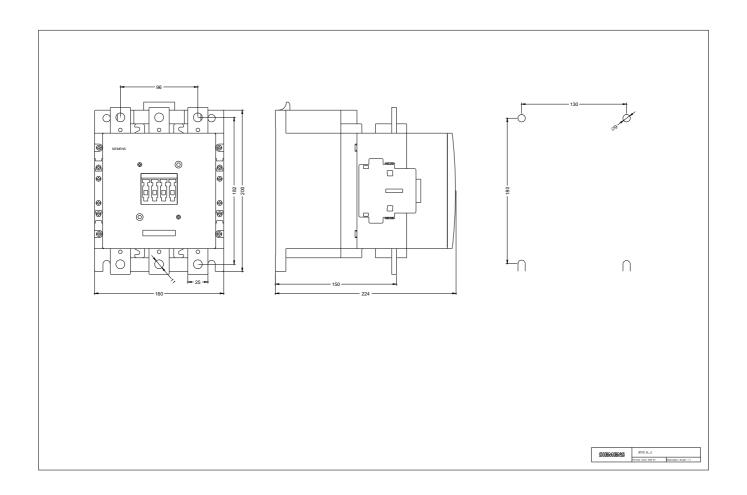
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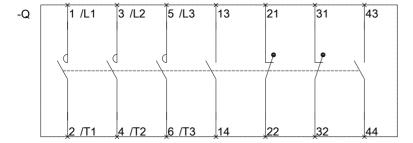
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1076-6LA06

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1076-6LA06

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1076-6LA06&lang=en





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