SIEMENS

Data sheet 3RT1076-6NP36



CONTACTOR, 250KW/400V/AC-3 AC(40...60HZ)/DC OPERATION UC 200-277V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S12 BAR CONNECTIONS ELECTRONIC OPERATING MECHANISM WITH 24V DC PLC INTERFACE SCREW TERMINAL

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:	
Size of contactor	S12
Insulation voltage	
Rated value	1 000 V
Degree of pollution	3
Surge voltage resistance Rated value	8 kV
Mechanical service life (switching cycles)	
 of the contactor typical 	10 000 000
 of the contactor with added electronics- 	5 000 000
compatible auxiliary switch block typical	
 of the contactor with added auxiliary switch 	10 000 000
block typical	
Protection class IP	
• on the front	IP00
 of the terminal 	IP00
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
during operation	-25 +60 °C

during storage	-55 +80 °C

Main circuit:	
Number of poles for main current circuit	3
Number of NC contacts for main contacts	0
Number of NO contacts for main contacts	3
Connectable conductor cross-section in main circuit	
at AC-1	
 at 60 °C minimum permissible 	370 mm ²
 at 40 °C minimum permissible 	370 mm ²
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
— at ambient temperature 60 °C Rated value	550 A
• at AC-3	
— at 400 V Rated value	500 A
— at 690 V Rated value	450 A
• at AC-4 at 400 V Rated value	430 A
Operating current for ≥ 200000 operating cycles at AC-4	
• at 400 V Rated value	175 A
• at 690 V Rated value	150 A
Operating current	
with 1 current path at DC-1	
— at 24 V Rated value	400 A
— at 110 V Rated value	33 A
 with 2 current paths in series at DC-1 	
— at 24 V Rated value	400 A
— at 110 V Rated value	400 A
• with 3 current paths in series at DC-1	
— at 24 V Rated value	400 A
— at 110 V Rated value	400 A
Operating current	
with 1 current path at DC-3 at DC-5	
— at 24 V Rated value	400 A
— at 110 V Rated value	3 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	400 A
— at 24 V Rated value	400 A
• with 3 current paths in series at DC-3 at DC-5	

- at 110 V Rated value 400 A 400 A 7 at 24 V Rated value Operating power		
Operating power • at AC-1 — at 230 V at 60 °C Rated value — at 690 V at 60 °C Rated value Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value • at 690 V Rated value 148 kW Thermal short-time current restricted to 10 s Active power loss at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency • with AC • for DC Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum 420 1/h	— at 110 V Rated value	400 A
• at AC-1 — at 230 V at 60 °C Rated value — at 690 V at 60 °C Rated value 624 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 98 kW • at 690 V Rated value 148 kW Thermal short-time current restricted to 10 s Active power loss at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency • with AC • for DC Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum 170 1/h • at AC-3 maximum 420 1/h	— at 24 V Rated value	400 A
- at 230 V at 60 °C Rated value 624 kW - at 690 V at 60 °C Rated value 624 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 98 kW • at 690 V Rated value 148 kW Thermal short-time current restricted to 10 s 4 000 A Active power loss at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency • with AC 2 000 1/h • for 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	Operating power	
— at 690 V at 60 °C Rated value 624 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 98 kW • at 690 V Rated value 148 kW Thermal short-time current restricted to 10 s 4 000 A Active power loss at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency • with AC 2 000 1/h • for 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-1	
Operating power for ≥ 200000 operating cycles at AC-4 • at 400 ∨ Rated value • at 690 ∨ Rated value 148 kW Thermal short-time current restricted to 10 s Active power loss at AC-3 at 400 ∨ for rated value of the operating current per conductor No-load switching frequency • with AC • for DC Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum 420 1/h	— at 230 V at 60 °C Rated value	151 kW
AC-4 • at 400 V Rated value • at 690 V Rated value 148 kW Thermal short-time current restricted to 10 s Active power loss at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency • with AC • for DC 2 000 1/h Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum 420 1/h	— at 690 V at 60 °C Rated value	624 kW
 at 690 V Rated value 148 kW Thermal short-time current restricted to 10 s 4 000 A Active power loss at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency with AC for DC 2 000 1/h Operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum 420 1/h 		
Thermal short-time current restricted to 10 s Active power loss at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency • with AC • for DC 2 000 1/h Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum 420 1/h	• at 400 V Rated value	98 kW
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency • with AC • for DC 2 000 1/h Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum 420 1/h	● at 690 V Rated value	148 kW
the operating current per conductor No-load switching frequency • with AC • for DC 2 000 1/h 2 000 1/h Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum 420 1/h	Thermal short-time current restricted to 10 s	4 000 A
No-load switching frequency 2 000 1/h • with AC 2 000 1/h • for 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	Active power loss at AC-3 at 400 V for rated value of	55 W
 with AC for DC 2 000 1/h Operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum 420 1/h 	the operating current per conductor	
• for 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	No-load switching frequency	
Operating frequency 500 1/h • at AC-1 maximum 500 1/h • at AC-2 maximum 170 1/h • at AC-3 maximum 420 1/h	• with AC	2 000 1/h
 at AC-1 maximum at AC-2 maximum at AC-3 maximum 420 1/h 	• for DC	2 000 1/h
 at AC-2 maximum at AC-3 maximum 420 1/h 	Operating frequency	
• at AC-3 maximum 420 1/h	• at AC-1 maximum	500 1/h
	• at AC-2 maximum	170 1/h
• at AC-4 maximum 130 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
Control supply voltage with AC	
● at 50 Hz Rated value	200 277 V
• at 60 Hz Rated value	200 277 V
Control supply voltage for DC	
Rated value	200 277 V
Rated value	40 Hz
Control supply voltage frequency 2 Rated value	60 Hz
Operating range factor control supply voltage rated	
value of the magnet coil with AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
Operating range factor control supply voltage rated	0.8 1.1
value of the magnet coil for DC	
Design of the surge suppressor	with varistor
Apparent pick-up power of the magnet coil with AC	750 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of the magnet coil with AC	7 V·A
Inductive power factor with the holding power of the coil	0.8
Closing power of the magnet coil for DC	800 W

Holding power of the magnet coil for DC	5 W
Closing delay	
• with AC	60 90 ms
• for DC	60 90 ms
Arcing time	10 15 ms

Auxiliary circuit:	
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	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

UL/CSA ratings:	
Contact rating of the auxiliary contacts acc. to UL	A600 / Q600

Short-circuit:	
Design of the fuse link	
 for short-circuit protection of the main circuit 	
 — with type of assignment 1 required 	fuse gL/gG: 630 A
 — with type of assignment 2 required 	fuse gL/gG: 500 A
 for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 10 A

Installation/ mounting/ dimensions:	
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

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Type of electrical connection

- for main current circuit
- for auxiliary and control current circuit

Type of connectable conductor cross-section

• for AWG conductors for main contacts

2/0 ... 500 kcmil

screw-type terminals

screw-type terminals

Type of connectable conductor cross-section

- for auxiliary contacts
 - solid
 - finely stranded with core end processing
- for AWG conductors for auxiliary 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)

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

Certificates/ approvals:

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



Test Certificates

Type Test
Certificates/Test
Report

Special Test Certificate



Shipping Approval





GL



other

Confirmation

Environmental Confirmations

other

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

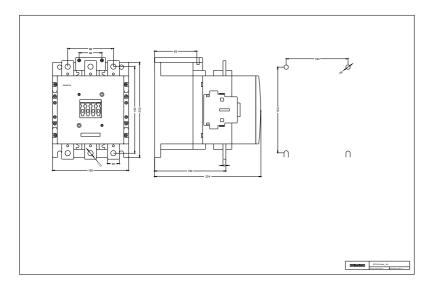
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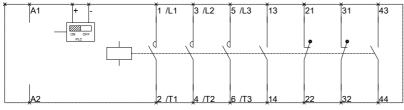
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10766NP36

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

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