

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
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 AC	8,5g / 5 ms, 4,2g / 10 ms
— at DC	8,5g / 5 ms, 4,2g / 10 ms
• with sine pulse	

— at AC	13,4g / 5 ms, 6,5g / 10 ms
— at DC	13,4g / 5 ms, 6,5g / 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	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
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 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
• 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	
• at 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
— at 24 V rated value	400 A
Operating power	
• at AC-1	
— at 230 V at 60 °C rated value	151 kW
— at 400 V rated value	362 kW
— at 690 V rated value	624 kW
— at 690 V at 60 °C rated value	624 kW
• at AC-2 at 400 V rated value	291 kW
• at AC-3	
— at 230 V rated value	164 kW
— at 400 V rated value	291 kW
— at 500 V rated value	363 kW
— at 690 V rated value	453 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
Control supply voltage at AC	

<ul style="list-style-type: none"> • at 50 Hz rated value • at 60 Hz rated value 	200 ... 277 V
Control supply voltage at DC	
<ul style="list-style-type: none"> • rated value 	200 ... 277 V
Control supply voltage frequency 1 rated value	50 Hz
Control supply voltage frequency 2 rated value	60 Hz
Operating range factor control supply voltage rated value of magnet coil at AC	
<ul style="list-style-type: none"> • at 50 Hz • at 60 Hz 	0.8 ... 1.1
Operating range factor control supply voltage rated value of magnet coil at DC	0.8 ... 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of magnet coil at AC	750 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of magnet coil at AC	9 V·A
Inductive power factor with the holding power of the coil	0.4
Closing power of magnet coil at DC	800 W
Holding power of magnet coil at DC	3.6 W
Closing delay	
<ul style="list-style-type: none"> • at AC • at DC 	60 ... 90 ms
Opening delay	
<ul style="list-style-type: none"> • at AC • at DC 	80 ... 100 ms
Arcing time	10 ... 15 ms

Auxiliary circuit:

Number of NC contacts	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact 	2
Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact 	2
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
<ul style="list-style-type: none"> • at 230 V rated value • at 400 V rated value 	6 A
	3 A
Operating current at DC-12	
<ul style="list-style-type: none"> • 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	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 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	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

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	
• at AWG conductors for main contacts	2/0 ... 500 kcmil
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				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	Typprüfbescheinigung/Werkszeugnis

Test Certificates	Shipping Approval				other
spezielle Prüfbescheinigung n	 ABS	 DNV	 GL	 RMRS	Bestätigungen

other	
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=3RT10766NP36>

Cax online generator

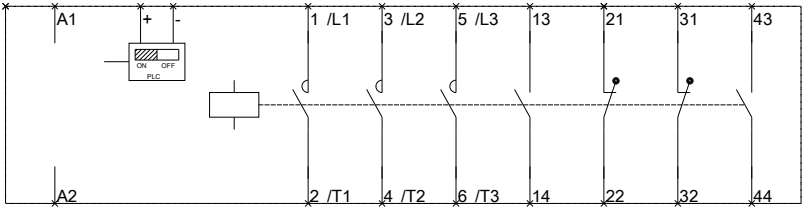
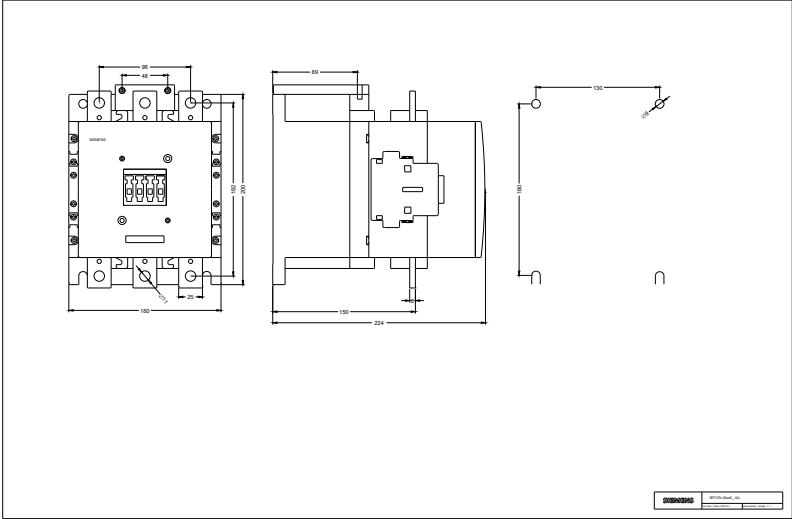
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10766NP36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10766NP36>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10766NP36&lang=en



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