



Figure similar

CONTACTOR, 250KW/400V/AC-3 AC(40...60HZ)/DC OPERATION
UC 21-27.3V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S12
BAR CONNECTIONS ELECTRONIC OPERATING MECHANISM
WITH 24V DC PLC INTERFACE SCREW TERMINAL

product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	S12
Insulation voltage	
• Rated value	1 000 V
Surge voltage resistance Rated value	8 kV
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Degree of pollution	3
Mechanical service life (switching cycles)	
• of the 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	
<ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C Rated value 	610 A
<ul style="list-style-type: none"> • at AC-1 up to 690 V <ul style="list-style-type: none"> — at ambient temperature 40 °C Rated value — at ambient temperature 60 °C Rated value 	610 A 550 A
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value — at 690 V Rated value 	500 A 450 A
Connectable conductor cross-section in main circuit at AC-1	
<ul style="list-style-type: none"> • at 60 °C minimum permissible • at 40 °C minimum permissible 	370 mm ² 370 mm ²
Operating current for ≥ 200000 operating cycles at AC-4	
<ul style="list-style-type: none"> • at 400 V Rated value • at 690 V Rated value 	175 A 150 A
Operating current	
<ul style="list-style-type: none"> • with 1 current path at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • with 2 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • with 3 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value 	400 A 33 A 400 A 400 A 400 A 400 A
Operating current	
<ul style="list-style-type: none"> • with 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value • with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value 	400 A 3 A 400 A 400 A 400 A 400 A
Operating power	
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 230 V at 60 °C Rated value — at 400 V Rated value 	151 kW 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 ≥ 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	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	
• at 50 Hz Rated value	21 ... 27.3 V
• at 60 Hz Rated value	21 ... 27.3 V
Control supply voltage at DC	
• Rated value	21 ... 27.3 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 at AC	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.8 ... 1.1
Operating range factor control supply voltage rated value of the magnet coil at DC	0.8 ... 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of the magnet coil at AC	750 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of the magnet coil at AC	7 V·A

Inductive power factor with the holding power of the coil	0.8
Closing power of the magnet coil at DC	800 W
Holding power of the magnet coil for DC	5 W
Closing delay	
• at AC	60 ... 90 ms
• at DC	60 ... 90 ms
Opening delay	
• at AC	80 ... 100 ms
• at DC	80 ... 100 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
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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

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-section	
• for AWG conductors for main contacts	2/0 ... 500 kcmil
Type of connectable conductor cross-section	
• 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)
• for AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
 CCC  CSA  EAC  UL	Baumusterbescheinigung	 EG-Konf.

Test Certificates	Shipping Approval
spezielle Prüfbescheinigungen Typprüfbescheinigung/Werkszeugnis	 ABS  DNV  GL  RMRS

other
sonstig Umweltbestätigung Bestätigungen

Further information

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

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

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

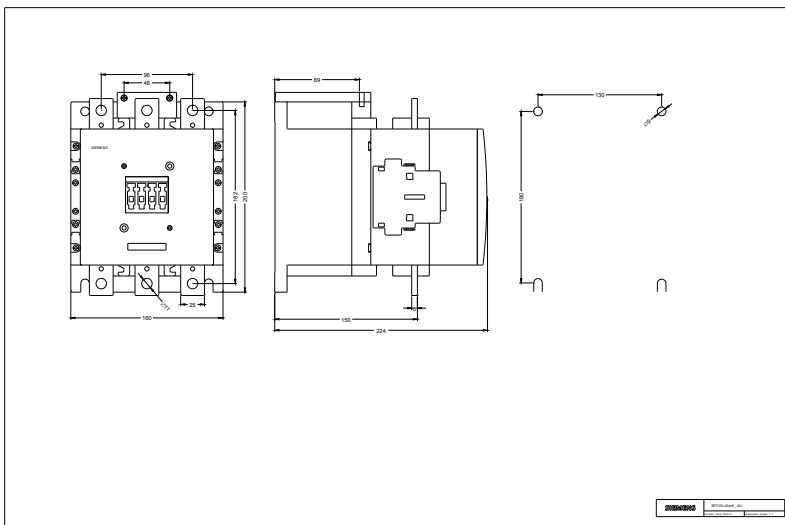
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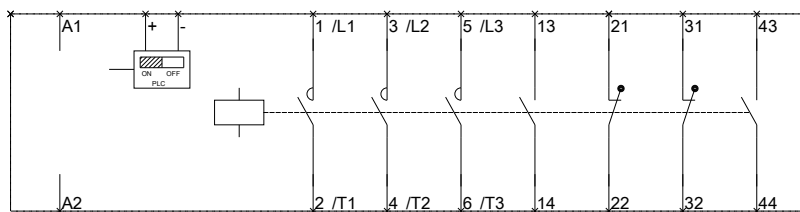
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10766NB36>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RT10766NB36&lang=en





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