



VAC. CONTACTOR, 250KW/400V/AC-3 AC/DC OPERATION UC
110-127V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S12
BAR CONNECTIONS CONVENT. OPERATING MECHANISM

Figure similar

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 500 A
Connectable conductor cross-section in main circuit at AC-1	
<ul style="list-style-type: none"> • at 60 °C minimum permissible 	370 mm ²
<ul style="list-style-type: none"> • at 40 °C minimum permissible 	370 mm ²
Operating current for ≥ 200000 operating cycles at AC-4	
<ul style="list-style-type: none"> • at 400 V Rated value 	215 A
<ul style="list-style-type: none"> • at 690 V Rated value 	151 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 — at 690 V Rated value — at 690 V at 60 °C Rated value • at AC-2 at 400 V Rated value • at AC-3 <ul style="list-style-type: none"> — at 230 V Rated value — at 400 V Rated value — at 500 V Rated value — at 690 V Rated value 	208 kW 362 kW 624 kW 624 kW 291 kW 164 kW 291 kW 363 kW 507 kW
Operating power for ≥ 200000 operating cycles at AC-4	
<ul style="list-style-type: none"> • at 400 V Rated value 	122 kW
<ul style="list-style-type: none"> • at 690 V Rated value 	212 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	32 W
No-load switching frequency	
<ul style="list-style-type: none"> • at AC 	2 000 1/h
<ul style="list-style-type: none"> • at DC 	2 000 1/h
Operating frequency	
<ul style="list-style-type: none"> • at AC-1 maximum 	700 1/h

• at AC-2 maximum	250 1/h
• at AC-3 maximum	750 1/h
• at AC-4 maximum	250 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	110 ... 127 V
• at 60 Hz Rated value	110 ... 127 V
Control supply voltage at DC	
• Rated value	110 ... 127 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	830 V·A
Inductive power factor with closing power of the coil	0.9
Apparent holding power of the magnet coil at AC	9.2 V·A
Inductive power factor with the holding power of the coil	0.9
Closing power of the magnet coil at DC	920 W
Holding power of the magnet coil for DC	10 W
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

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	

<ul style="list-style-type: none"> • at 230 V Rated value • at 400 V Rated value 	<p>6 A</p> <p>3 A</p>
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 	<p>6 A</p> <p>3 A</p> <p>1 A</p>
Operating current at DC-13	
<ul style="list-style-type: none"> • at 24 V Rated value • at 60 V Rated value • at 110 V Rated value • at 220 V Rated value 	<p>10 A</p> <p>2 A</p> <p>1 A</p> <p>0.3 A</p>

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

Short-circuit:	
Design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of assignment 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 	<p>fuse gL/gG: 800 A</p> <p>fuse gL/gG: 800 A</p> <p>fuse gL/gG: 10 A</p>

Installation/ mounting/ dimensions:	
Mounting type	screw fixing
<ul style="list-style-type: none"> • Side-by-side mounting 	Yes
Height	210 mm
Width	145 mm
Depth	206 mm
Required spacing	
<ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — at the side 	10 mm

Connections/ Terminals:	
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 	<p>screw-type terminals</p> <p>screw-type terminals</p>
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> • for AWG conductors for main contacts 	2/0 ... 500 kcmil
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — finely stranded with core end processing • for AWG conductors for auxiliary contacts 	<p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p>

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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CCC



CSA



UL

[Baumusterbescheinigung](#)



EG-Konf.

Test Certificates	Shipping Approval	other
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ABS



GL



RMRS

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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

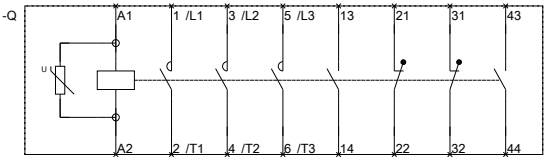
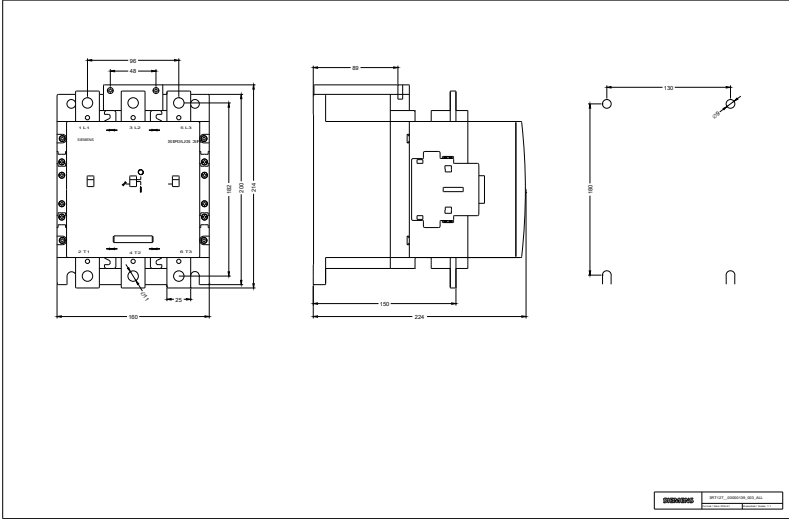
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RT12766AF36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT12766AF36>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RT12766AF36&lang=en



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3RT106--A.6_01_4_IEC.DXF
3RT107--A.6_01_4_IEC.DXF