## **SIEMENS**

Data sheet 3RT1066-6LA06



CONTACTOR, 160KW/400V/AC-3 WITHOUT COIL AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S10 MAIN COND.: BAR CONNECTIONS CONVENT. OPERATING MECHANISM AUX. COND.: SCREW TERMINALS

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:		
Insulation voltage		
Rated value	V	1 000
Degree of pollution		3
Surge voltage resistance Rated value	kV	8
Mechanical service life (switching cycles)		
<ul> <li>of the contactor typical</li> </ul>		10 000 000
<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>		5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>		10 000 000
Thermal short-time current restricted to 10 s	Α	2 400
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

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
Operating current	

— at 400 V at ambient temperature 40 °C Rated value  — up to 690 V at ambient temperature 40 °C Rated value  — up to 690 V at ambient temperature 60 °C Rated value  — up to 690 V at ambient temperature 60 °C Rated value  — up to 690 V Rated value  — at 400 V Rated value  — at 690 V Rated value  — at 400 V Rated value  — at 2400 V Rated value  — at 240 Rated value  — at 100-1  — at 24 V Rated value  — at 110 V Rated value  — at 124 V Rated value  — at 110 V Rated value  — at 24 V Rated value  — at 25 V Rated value  — at 26 V Rated value  — at 27 V Rated value  — at 28 V Rate	• at AC-1		
up to 690 V at ambient temperature 40 °C Rated value up to 690 V at ambient temperature 60 °C Rated value up to 690 V at ambient temperature 60 °C Rated value  • at AC-3 at 400 V Rated value at 690 V Rated value at 240 V Rated value at 124 V Rated value at 110 V Rated value at 24 V Rated value	— at 400 V at ambient temperature 40 °C	Α	330
Rated value — up to 690 V at ambient temperature 60 °C Rated value • at AC-3 — at 400 V Rated value — at 690 V Rated value A 280 • at AC-4 at 400 V Rated value A 280  Operating current with 1 current path • at DC-3 — at 24 V Rated value — at 110 V Rated value — at 110 V Rated value A 300 — at 110 V Rated value A 300 — at 110 V Rated value A 300 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 3 current paths in series • at DC-3 — at 110 V Rated value A 300 • at DC-3 — at 24 V Rated value A 300 Operating power • at AC-1 at 400 V Rated value  * at AC-1 — at 230 V at 60 °C Rated value * kW 113	Rated value		
Rated value		Α	330
- at 400 ∨ Rated value - at 690 ∨ Rated value		Α	300
- at 690 ∨ Rated value  • at AC-4 at 400 ∨ Rated value  • at AC-4 at 400 ∨ Rated value  A 280  Operating current with 1 current path  • at DC-1  - at 24 ∨ Rated value  - at 110 ∨ Rated value  - at 24 ∨ Rated value  - at 110 ∨ Rated value  - at 24 ∨ Rated value  - at 24 ∨ Rated value  - at 24 ∨ Rated value  - at 110 ∨ Rated value  - at 24 ∨ Rated value  - at 300  Operating current with 3 current paths in series  • at DC-1  - at 24 ∨ Rated value  - at 24 ∨ Rated value  - at 300  • at C-3 at DC-5  - at 110 ∨ Rated value  - at 24 ∨ Rated value	• at AC-3		
• at AC-4 at 400 V Rated value A 280  Operating current with 1 current path  • at DC-1  — at 24 V Rated value A 300  — at 110 V Rated value A 300  — at 110 V Rated value A 300  — at 24 V Rated value A 300  — at 110 V Rated value A 300  Operating current with 2 current paths in series  • at DC-1  — at 24 V Rated value A 300  — at 110 V Rated value A 300  • at DC-3 at DC-5  — at 110 V Rated value A 300  • at DC-3 at DC-5  — at 110 V Rated value A 300  Operating current with 3 current paths in series  • at DC-1  — at 24 V Rated value A 300  Operating current with 3 current paths in series  • at DC-1  — at 24 V Rated value A 300  Operating current with 3 current paths in series  • at DC-1  — at 24 V Rated value A 300  Operating current with 3 current paths in series  • at DC-1  — at 24 V Rated value A 300  • at AC-1  — at 400 V Rated value A 300  Operating power  • at AC-1 at 400 V Rated value W 197  • at AC-2 at 400 V Rated value W 171  • at AC-4 at 400 V Rated value W 160 000  Operating power  • at AC-1  — at 230 V at 60 °C Rated value KW 113	— at 400 V Rated value	Α	300
Operating current with 1 current path              • at DC-1             — at 24 V Rated value             — at 110 V Rated value             — at 210 V Rated value             — at 24 V Rated value             — at 24 V Rated value             — at 24 V Rated value             — at 110 V Rated value             — at 110 V Rated value             — at 110 V Rated value             — at 24 V Rated value             — at 24 V Rated value             — at 110 V Rated value             — at 110 V Rated value             — at 24 V Rated value	— at 690 V Rated value	Α	280
• at DC-1  — at 24 V Rated value — at 110 V Rated value A 33  • at DC-3 at DC-5 — at 24 V Rated value A 300  — at 110 V Rated value A 300  — at 110 V Rated value A 300  Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 300  • at DC-3 at DC-5 — at 110 V Rated value A 300  • at DC-3 at DC-5 — at 110 V Rated value A 300  Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300  Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300  Operating current with 3 current paths in series • at DC-3 at DC-5 — at 110 V Rated value A 300  • at DC-3 at DC-5 — at 110 V Rated value A 300  • at AC-1 at 400 V Rated value  • at AC-2 at 400 V Rated value  • at AC-4 at 400 V Rated value  • at AC-1 — at 230 V at 60 °C Rated value  RW 113	• at AC-4 at 400 V Rated value	Α	280
- at 24 V Rated value     - at 110 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 24 V Rated value     - at 110 V Rated value     - at 110 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 24 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 100-1     - at 24 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 24 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 110 V Rated value     - at 110 V Rated value     - at 110 V Rated value     - at 24 V Rated value     - at 24 V Rated value     - at 25 V Rated value     - at 2	Operating current with 1 current path	_	
- at 110 V Rated value	• at DC-1		
• at DC-3 at DC-5  — at 24 V Rated value A 300  Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 300 • at DC-3 at DC-5 — at 110 V Rated value A 300 • at DC-3 at DC-5 — at 110 V Rated value A 300 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 300 • at DC-3 at DC-5 — at 110 V Rated value A 300 • at DC-3 at DC-5 — at 110 V Rated value A 300 Operating power • at AC-1 at 400 V Rated value A 300 Operating power • at AC-4 at 400 V Rated value W 160 000 Operating power • at AC-1 — at 230 V at 60 °C Rated value  kW 113	— at 24 V Rated value	Α	300
	— at 110 V Rated value	Α	33
— at 110 V Rated value A 3  Operating current with 2 current paths in series  ■ at DC-1  — at 24 V Rated value A 300  — at 110 V Rated value A 300  ■ at DC-3 at DC-5  — at 110 V Rated value A 300  Operating current with 3 current paths in series  ■ at DC-1  — at 24 V Rated value A 300  Operating current with 3 current paths in series  ■ at DC-1  — at 24 V Rated value A 300  ■ at DC-3 at DC-5  — at 110 V Rated value A 300  ■ at DC-3 at DC-5  — at 110 V Rated value A 300  ■ at DC-3 at DC-5  — at 110 V Rated value A 300  ■ at DC-3 at DC-5  — at 14 V Rated value A 300  Operating power  ■ at AC-1 at 400 V Rated value W 197  ■ at AC-2 at 400 V Rated value W 171  ■ at AC-4 at 400 V Rated value W 160 000  Operating power  ■ at AC-1  — at 230 V at 60 °C Rated value W 113	• at DC-3 at DC-5		
Operating current with 2 current paths in series         ● at DC-1         — at 24 V Rated value       A 300         — at 110 V Rated value       A 300         • at DC-3 at DC-5       A 300         — at 24 V Rated value       A 300         Operating current with 3 current paths in series       • at DC-1         — at 24 V Rated value       A 300         — at 110 V Rated value       A 300         • at DC-3 at DC-5       — at 110 V Rated value         — at 24 V Rated value       A 300         Operating power       • at AC-1 at 400 V Rated value       kW 197         • at AC-2 at 400 V Rated value       kW 171         • at AC-4 at 400 V Rated value       W 160 000         Operating power       • at AC-1         • at AC-1       — at 230 V at 60 °C Rated value	— at 24 V Rated value	Α	300
■ at DC-1     — at 24 V Rated value     — at 110 V Rated value     ■ at DC-3 at DC-5     — at 110 V Rated value     A 300      ● at DC-3 at DC-5     — at 24 V Rated value     A 300  Operating current with 3 current paths in series     ■ at DC-1     — at 24 V Rated value     A 300  Operating current with 3 current paths in series      ■ at DC-1     — at 24 V Rated value     A 300     — at 110 V Rated value     A 300      ● at DC-3 at DC-5     — at 110 V Rated value     A 300     ● at AC-1 at 400 V Rated value     A 300  Operating power     ● at AC-2 at 400 V Rated value     A 4 300  Operating power     ● at AC-4 at 400 V Rated value     W 197     ● at AC-4 at 400 V Rated value     W 160 000  Operating power     ● at AC-1     — at 230 V at 60 °C Rated value     KW 113	— at 110 V Rated value	Α	3
at 24 V Rated value at 110 V Rated value at 10 V Rated value at 10 V Rated value at 110 V Rated value at 24 V Rated value at 10 V Rated value at 24 V Rated value at 25 V Rated value at 26 V Rated value at 27 V Rated value at 28 V Rated va	Operating current with 2 current paths in series		
— at 110 V Rated value  • at DC-3 at DC-5  — at 110 V Rated value A 300  Operating current with 3 current paths in series  • at DC-1  — at 24 V Rated value A 300  Operating current with 3 current paths in series  • at DC-1  — at 24 V Rated value A 300  • at DC-3 at DC-5  — at 110 V Rated value A 300  • at DC-3 at DC-5  — at 110 V Rated value A 300  Operating power  • at AC-1 at 400 V Rated value kW 197  • at AC-2 at 400 V Rated value kW 171  • at AC-4 at 400 V Rated value V 160 000  Operating power  • at AC-1  — at 230 V at 60 °C Rated value kW 113	• at DC-1		
at DC-3 at DC-5     — at 110 V Rated value     — at 24 V Rated value     A 300  Operating current with 3 current paths in series      at DC-1     — at 24 V Rated value     A 300     — at 110 V Rated value     A 300     — at 110 V Rated value     A 300     — at 110 V Rated value     A 300     — at 24 V Rated value     A 300 Operating power      at AC-1 at 400 V Rated value     kW 197     at AC-2 at 400 V Rated value     value     at AC-4 at 400 V Rated value	— at 24 V Rated value	Α	300
at 110 V Rated value A 300  at 24 V Rated value A 300  Operating current with 3 current paths in series  ■ at DC-1  —- at 24 V Rated value A 300  —- at 110 V Rated value A 300  ■ at DC-3 at DC-5  —- at 110 V Rated value A 300  —- at 24 V Rated value A 300  Operating power  ■ at AC-1 at 400 V Rated value kW 197  ■ at AC-4 at 400 V Rated value W 171  ■ at AC-4 at 400 V Rated value W 160 000  Operating power  ■ at AC-1  —- at 230 V at 60 °C Rated value kW 113	— at 110 V Rated value	Α	300
— at 24 V Rated value A 300  Operating current with 3 current paths in series	• at DC-3 at DC-5		
Operating current with 3 current paths in series         • at DC-1         — at 24 V Rated value       A         — at 110 V Rated value       A         • at DC-3 at DC-5         — at 110 V Rated value       A         — at 24 V Rated value       A         Operating power         • at AC-1 at 400 V Rated value       kW         • at AC-2 at 400 V Rated value       kW         • at AC-4 at 400 V Rated value       W         • at AC-1 at 400 V Rated value       W         • at AC-1 at 400 V Rated value       W	— at 110 V Rated value	Α	300
<ul> <li>at DC-1         — at 24 V Rated value         — at 110 V Rated value         <ul> <li>at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>at 24 V Rated value</li> <li>at 24 V Rated value</li> </ul> </li> <li>Operating power         <ul> <li>at AC-1 at 400 V Rated value</li> <li>at AC-2 at 400 V Rated value</li> <li>at AC-4 at 400 V Rated value</li> <li>at AC-4 at 400 V Rated value</li> <li>at AC-3 at 400 V Rated value</li> </ul> </li> <li>Operating power         <ul> <li>at AC-1</li> <li>at AC-1</li> <li>at AC-3</li> <li>at AC-4</li> <li>at AC-1</li> <li>at AC-1</li> <li>at AC-1</li> </ul> </li> </ul>	— at 24 V Rated value	Α	300
- at 24 V Rated value A 300  - at 110 V Rated value A 300  ● at DC-3 at DC-5  - at 110 V Rated value A 300  A 300  A 300  A 300  Operating power  ● at AC-1 at 400 V Rated value BW 197  ● at AC-2 at 400 V Rated value BW 171  ● at AC-4 at 400 V Rated value BW 160 000  Operating power  ● at AC-1  - at 230 V at 60 °C Rated value BW 113	Operating current with 3 current paths in series		
<ul> <li>— at 110 V Rated value</li> <li>● at DC-3 at DC-5</li> <li>— at 110 V Rated value</li> <li>— at 24 V Rated value</li> <li>A 300</li> <li>Operating power</li> <li>● at AC-1 at 400 V Rated value</li> <li>★W 197</li> <li>● at AC-2 at 400 V Rated value</li> <li>★W 171</li> <li>● at AC-4 at 400 V Rated value</li> <li>W 160 000</li> <li>Operating power</li> <li>● at AC-1</li> <li>— at 230 V at 60 °C Rated value</li> <li>★W 113</li> </ul>	• at DC-1		
<ul> <li>at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>at 24 V Rated value</li> </ul> </li> <li>Operating power         <ul> <li>at AC-1 at 400 V Rated value</li> <li>at AC-2 at 400 V Rated value</li> <li>at AC-4 at 400 V Rated value</li> <li>at AC-4 at 400 V Rated value</li> </ul> </li> <li>Operating power         <ul> <li>at AC-1</li> <li>at AC-1</li> <li>at AC-1</li> <li>at 230 V at 60 °C Rated value</li> <li>kW</li> <li>113</li> </ul> </li> </ul>	— at 24 V Rated value	Α	300
— at 110 V Rated value       A       300         — at 24 V Rated value       A       300         Operating power         • at AC-1 at 400 V Rated value       kW       197         • at AC-2 at 400 V Rated value       kW       171         • at AC-4 at 400 V Rated value       W       160 000         Operating power         • at AC-1       — at 230 V at 60 °C Rated value       kW       113	— at 110 V Rated value	Α	300
— at 24 V Rated value       A       300         Operating power         ● at AC-1 at 400 V Rated value       kW       197         ● at AC-2 at 400 V Rated value       kW       171         ● at AC-4 at 400 V Rated value       W       160 000         Operating power         ● at AC-1       — at 230 V at 60 °C Rated value       kW       113	• at DC-3 at DC-5		
Operating power  • at AC-1 at 400 V Rated value	— at 110 V Rated value	Α	300
<ul> <li>at AC-1 at 400 V Rated value</li> <li>at AC-2 at 400 V Rated value</li> <li>at AC-4 at 400 V Rated value</li> <li>at AC-4 at 400 V Rated value</li> <li>at AC-1</li> <li>at AC-1</li> <li>at 230 V at 60 °C Rated value</li> <li>kW</li> <li>197</li> <li>171</li> <li>160 000</li> <li>160 000</li> <li>113</li> </ul>	— at 24 V Rated value	Α	300
• at AC-2 at 400 V Rated value	Operating power		
at AC-4 at 400 V Rated value  Operating power      at AC-1  — at 230 V at 60 °C Rated value  W 160 000  W 160 000	• at AC-1 at 400 V Rated value	kW	197
Operating power  • at AC-1  — at 230 V at 60 °C Rated value kW 113	• at AC-2 at 400 V Rated value	kW	171
• at AC-1 — at 230 V at 60 °C Rated value kW 113	• at AC-4 at 400 V Rated value	W	160 000
— at 230 V at 60 °C Rated value kW 113	Operating power		
	● at AC-1		
— at 690 V at 60 °C Rated value kW 340	— at 230 V at 60 °C Rated value	kW	113
— at 650 v at 60 C Trated value	— at 690 V at 60 °C Rated value	kW	340
— at 690 V Rated value kW 340	— at 690 V Rated value	kW	340
• at AC-3	● at AC-3		

— at 230 V Rated value	kW	97
— at 400 V Rated value	kW	171
— at 500 V Rated value	kW	215
— at 690 V Rated value	kW	280
Operating power for ≥ 200000 operating cycles at		
AC-4		
● at 400 V Rated value	kW	71
● at 690 V Rated value	kW	112
Operating frequency		
• at AC-3 maximum	1/h	500
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC/DC
Rated value	Hz	40
Control supply voltage frequency 2 Rated value	Hz	60
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-15		
• at 230 V Rated value	Α	6
• at 400 V Rated value	Α	3
Operating current		
• at DC-12 at 220 V Rated value	Α	1
• at DC-13 at 220 V Rated value	Α	0.3
Operating current		
● at DC-12		
— at 60 V Rated value	Α	6
— at 110 V Rated value	Α	3
• at DC-13		
— at 24 V Rated value	Α	10
— at 60 V Rated value	Α	2
— at 110 V Rated value	Α	1
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		

<ul> <li>— with type of assignment 1 required</li> </ul>	fuse gL/gG: 500 A
<ul> <li>— with type of assignment 2 required</li> </ul>	fuse gL/gG: 400 A
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A
required	

Mounting type		screw fixing
<ul> <li>Side-by-side mounting</li> </ul>		Yes
Height	mm	210
Width	mm	145
Depth	mm	202
Required spacing		
<ul><li>for grounded parts</li></ul>		
— at the side	mm	10

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Type of connectable conductor cross-section	
<ul> <li>for AWG conductors for main contacts</li> </ul>	2/0 500 kcmil
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x
	(0.75 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 1x 12

Mechanical data:		
Size of contactor		S10
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		

Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 +60
during storage	°C	-55 <b>+</b> 80

### Certificates/ approvals:

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









Type Examination



Test Certificates	Shipping Ap	proval		other	
Special Test Certificate	OF SHIPPING	GL®		Environmental Confirmations	Confirmation
	ABS	GL	RMRS		

#### other

other

#### Further informatior

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

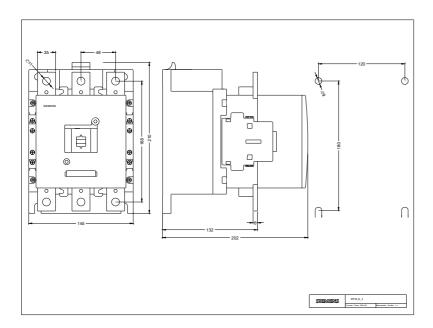
#### Cax online generator

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

http://support.automation.siemens.com/WW/view/en/3RT10666LA06/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10666LA06&lang=en





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