



Figure similar

CONTACTOR, 690A/AC-1 AC(40...60HZ)/DC
OPERATION UC 110-127V AUXILIARY CONTACTS
2NO+2NC 3-POLE, SIZE S12 BAR CONNECTIONS
CONVENT. OPERATING MECHANISM

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)		
• 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
Thermal short-time current restricted to 10 s	A	4 000
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		

<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — 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 • at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value — at 690 V Rated value 	A	690
	A	690
	A	650
	A	170
	A	170
Operating current with 1 current path		
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value 	A	500
	A	33
	A	500
	A	3
Operating current with 2 current paths in series		
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value 	A	500
	A	500
	A	500
	A	500
	A	500
Operating current with 3 current paths in series		
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value 	A	500
	A	500
	A	500
	A	500
	A	500
Operating power		
<ul style="list-style-type: none"> • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value 	kW	430
	kW	90
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 690 V at 60 °C Rated value — at 690 V Rated value • at AC-3 <ul style="list-style-type: none"> — at 230 V Rated value — at 400 V Rated value 	kW	245
	kW	740
	kW	740
	kW	160
	kW	90

- at 500 V Rated value
- at 690 V Rated value

kW	110
kW	160

Control circuit/ Control:

Type of voltage of the control supply voltage		AC/DC
Control supply voltage with AC		
• at 50 Hz Rated value	V	110 ... 127
• at 60 Hz Rated value	V	110 ... 127
Control supply voltage for DC		
• Rated value	V	110 ... 127
• Rated value	Hz	40
Control supply voltage frequency 2 Rated value	Hz	60
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 value of the magnet coil for DC		0.8 ... 1.1
Design of the surge suppressor		with varistor
Apparent pick-up power of the magnet coil with AC	V·A	830
Apparent holding power of the magnet coil with AC	V·A	9.2
Closing power of the magnet coil for DC	W	920
Holding power of the magnet coil for DC	W	10
Inductive power factor		
• with closing power of the coil		0.9
• with the holding power of the coil		0.9

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	A	6
• at 400 V Rated value	A	3
Operating current		
• at DC-12 at 220 V Rated value	A	1
• at DC-13 at 220 V Rated value	A	0.3
Operating current		
• at DC-12		
— at 60 V Rated value	A	6
— at 110 V Rated value	A	3

- at DC-13
 - at 24 V Rated value
 - at 60 V Rated value
 - at 110 V Rated value

A	10
A	2
A	1

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 <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 		fuse gL/gG: 800 A fuse gL/gG: 710 A fuse gL/gG: 10 A
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Installation/ mounting/ dimensions:

Mounting type <ul style="list-style-type: none"> • Side-by-side mounting 		screw fixing Yes
Height	mm	214
Width	mm	160
Depth	mm	225
Required spacing <ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — at the side 	mm	10

Connections/ Terminals:

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

Mechanical data:

Size of contactor		S12
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Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature <ul style="list-style-type: none"> • during operation 	°C	-25 ... +60

- during storage

°C

-55 ... +80

Certificates/ approvals:

General Product Approval

Functional Safety/Safety of Machinery

Declaration of Conformity



[Type Examination](#)



Test Certificates

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<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&mlfb=3RT14766AF36>

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

<http://support.automation.siemens.com/WW/view/en/3RT14766AF36/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=3RT14766AF36&lang=en

