



CONTACTOR, 90KW/400V/AC-3, AC(40...60HZ)/DC
OPERATION UC 110...127V AUXIL. CONTACTS
2NO+2NC 3-POLE, SIZE S6 BAR CONNECTIONS
CONVENTION. OPERATING MECHANISM SCREW
TERMINAL

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)		
• 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	1 480
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 • at AC-4 at 400 V Rated value 	A	215
<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 • at AC-4 at 400 V Rated value 	A	215
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — 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 • at AC-4 at 400 V Rated value 	A	185
<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 • at AC-4 at 400 V Rated value 	A	185
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 690 V Rated value • at AC-4 at 400 V Rated value 	A	170
<ul style="list-style-type: none"> • at AC-4 at 400 V Rated value 	A	160
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	160
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 110 V Rated value 	A	18
<ul style="list-style-type: none"> • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value 	A	160
<ul style="list-style-type: none"> • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value 	A	2.5
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	160
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 110 V Rated value 	A	160
<ul style="list-style-type: none"> • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value 	A	160
<ul style="list-style-type: none"> • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value 	A	160
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	160
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 110 V Rated value 	A	160
<ul style="list-style-type: none"> • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value 	A	160
<ul style="list-style-type: none"> • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value 	A	160
Operating power		
<ul style="list-style-type: none"> • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value 	kW	121
<ul style="list-style-type: none"> • at AC-2 at 400 V Rated value 	kW	104
<ul style="list-style-type: none"> • at AC-4 at 400 V Rated value 	W	90 000
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 	kW	70
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 690 V at 60 °C Rated value 	kW	210
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 690 V Rated value 	kW	210
<ul style="list-style-type: none"> • at AC-3 		

— at 230 V Rated value	kW	61
— at 400 V Rated value	kW	104
— at 500 V Rated value	kW	132
— at 690 V Rated value	kW	167
Operating power for ≥ 200000 operating cycles at AC-4		
• at 400 V Rated value	kW	45
• at 690 V Rated value	kW	65
Operating frequency		
• at AC-3 maximum	1/h	750

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	300
Apparent holding power of the magnet coil with AC	V·A	5.8
Closing power of the magnet coil for DC	W	360
Holding power of the magnet coil for DC	W	5.2
Inductive power factor		
• with closing power of the coil		0.9
• with the holding power of the coil		0.8

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

<ul style="list-style-type: none"> • at 400 V Rated value 	A	3
Operating current		
<ul style="list-style-type: none"> • at DC-12 at 220 V Rated value 	A	1
<ul style="list-style-type: none"> • at DC-13 at 220 V Rated value 	A	0.3
Operating current		
<ul style="list-style-type: none"> • at DC-12 <ul style="list-style-type: none"> — at 60 V Rated value — at 110 V Rated value 	A	6
	A	3
<ul style="list-style-type: none"> • at DC-13 <ul style="list-style-type: none"> — 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

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: 355 A fuse gL/gG: 315 A fuse gL/gG: 10 A

Installation/ mounting/ dimensions:		
Mounting type		screw fixing
<ul style="list-style-type: none"> • Side-by-side mounting 		Yes
Height	mm	172
Width	mm	120
Depth	mm	170
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 		4 ... 250 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 S6





Ambient conditions:





Installation altitude at height above sea level maximum m 2 000

Ambient temperature

- during operation °C -25 ... +60
- during storage °C -55 ... +80

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
 CSA	 UL	 EAC	 EG-Konf.
	Type Examination		Type Test Certificates/Test Report

Test Certificates	Shipping Approval
Special Test Certificate	other
 ABS	 DNV
	 GL
	 RMRS

other		
Confirmation	Environmental Confirmations	other

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

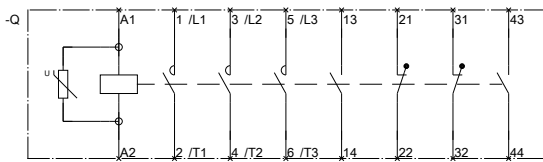
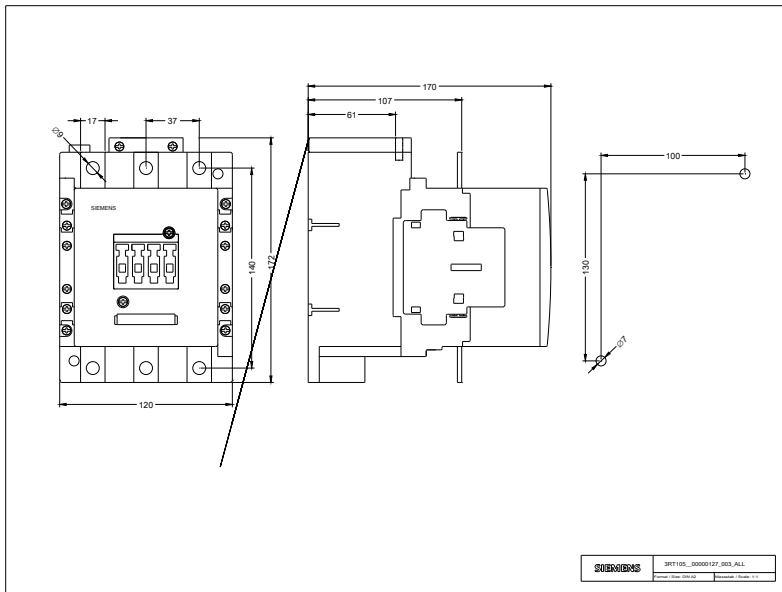
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10566AF36>

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

<http://support.automation.siemens.com/WW/view/en/3RT10566AF36/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=3RT10566AF36&lang=en



last modified:

11.03.2015

3RT106--A.6.01_4_IEC.DXF
3RT107--A.6.01_4_IEC.DXF