



Figure similar

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

product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	S6
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 • at AC-1 at 400 V — at ambient temperature 40 °C Rated value • at AC-1 up to 690 V — at ambient temperature 40 °C Rated value — at ambient temperature 60 °C Rated value • at AC-3 — at 400 V Rated value — at 690 V Rated value	215 A 215 A 185 A 185 A 170 A
Connectable conductor cross-section in main circuit at AC-1 • at 60 °C minimum permissible • at 40 °C minimum permissible	95 mm ² 95 mm ²
Operating current for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value	81 A 65 A
Operating current • with 1 current path at DC-1 — at 24 V Rated value — at 110 V Rated value • with 2 current paths in series at DC-1 — at 24 V Rated value — at 110 V Rated value • with 3 current paths in series at DC-1 — at 24 V Rated value — at 110 V Rated value	160 A 18 A 160 A 160 A 160 A 160 A
Operating current • with 1 current path at DC-3 at DC-5 — at 24 V Rated value — at 110 V Rated value • with 2 current paths in series at DC-3 at DC-5 — at 110 V Rated value — at 24 V Rated value • with 3 current paths in series at DC-3 at DC-5 — at 110 V Rated value — at 24 V Rated value	160 A 2.5 A 160 A 160 A 160 A 160 A
Operating power • at AC-1 — at 230 V at 60 °C Rated value — at 400 V Rated value	70 kW 121 kW

— at 690 V Rated value	210 kW
— at 690 V at 60 °C Rated value	210 kW
• at AC-2 at 400 V Rated value	104 kW
• at AC-3	
— at 230 V Rated value	61 kW
— at 400 V Rated value	104 kW
— at 500 V Rated value	132 kW
— at 690 V Rated value	167 kW
Operating power for ≥ 200000 operating cycles at AC-4	
• at 400 V Rated value	45 kW
• at 690 V Rated value	65 kW
Thermal short-time current restricted to 10 s	1 480 A
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor	13 W
No-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
Operating frequency	
• at AC-1 maximum	800 1/h
• at AC-2 maximum	300 1/h
• at AC-3 maximum	750 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	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	300 V·A
Inductive power factor with closing power of the coil	0.9
Apparent holding power of the magnet coil at AC	5.8 V·A

Inductive power factor with the holding power of the coil	0.8
Closing power of the magnet coil at DC	360 W
Holding power of the magnet coil for DC	5.2 W
Closing delay	
• at AC	20 ... 95 ms
• at DC	20 ... 95 ms
Opening delay	
• at AC	40 ... 60 ms
• at DC	40 ... 60 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: 355 A
— with type of assignment 2 required	fuse gL/gG: 315 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	172 mm
Width	120 mm
Depth	170 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	4 ... 250 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	Test Certificates
 CSA  UL  EAC	Baumusterbescheinigung	 EG-Konf.	spezielle Prüfbescheinigungen

Test Certificates	Shipping Approval	other
sonstig	 ABS  DNV  GL  RMRS	Umweltbestätigung

other
Bestätigungen sonstig

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

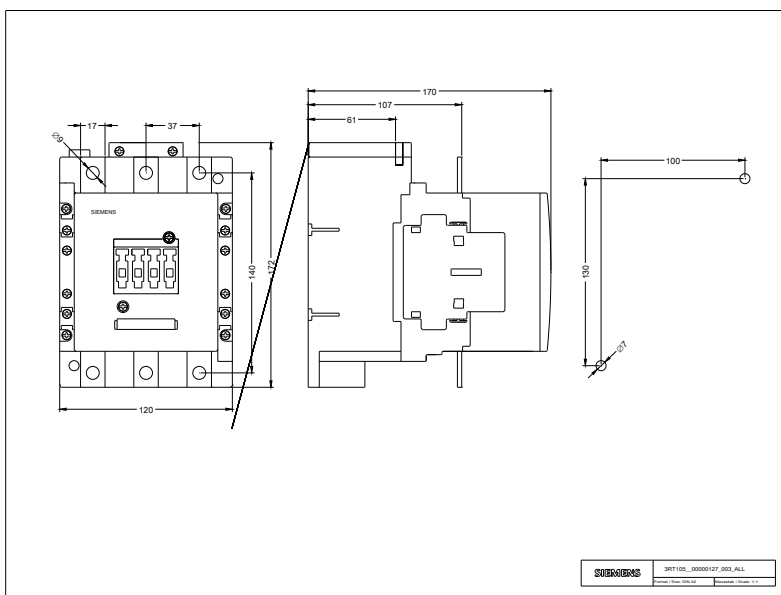
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10566AF363PA0>

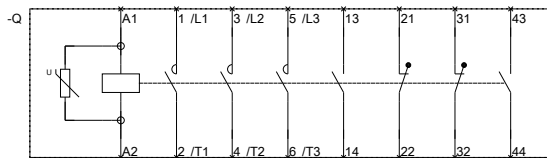
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10566AF363PA0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10566AF363PA0&lang=en





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