

CONTACTOR, 275A/AC-1, AC(40...60HZ)/DC OPERATION UC
220...240V AUXIL. CONTACTS 2NO+2NC 3-POLE, SIZE S6 BAR
CONNECTIONS CONVENT. OPERATING MECHANISM



Figure similar

product brand name	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S6
Insulation voltage	
• rated value	1 000 V
Degree of pollution	3
Surge voltage resistance rated value	8 kV
maximum permissible voltage for safe isolation	
• between coil and main contacts acc. to EN 60947-1	690 V
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Shock resistance	
• at rectangular impulse	
— at AC	8,5g / 5 ms, 4,2g / 10 ms

— at DC	8,5g / 5 ms, 4,2g / 10 ms
• with sine pulse	
— at AC	13,4g / 5 ms, 6,5g / 10 ms
— at DC	13,4g / 5 ms, 6,5g / 10 ms
Mechanical service life (switching cycles)	
• of 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 poles for main current circuit	3
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	275 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	275 A
— up to 690 V at ambient temperature 60 °C rated value	250 A
— up to 1000 V at ambient temperature 40 °C rated value	100 A
— up to 1000 V at ambient temperature 60 °C rated value	100 A
• at AC-3	
— at 400 V rated value	97 A
— at 690 V rated value	97 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	95 mm²
• at 40 °C minimum permissible	95 mm²
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	250 A

— at 110 V rated value	18 A
• with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value	250 A 250 A
• with 3 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value	250 A 250 A
Operating current	
• at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value	250 A 2.5 A
• with 2 current paths in series at DC-3 at DC-5 — at 110 V rated value — at 24 V rated value	250 A 250 A
• with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value — at 24 V rated value	250 A 250 A
Operating power	
• at AC-1 — 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 1000 V at 60 °C rated value	95 kW 165 kW 285 kW 285 kW 165 W
• at AC-2 at 400 V rated value	55 kW
• at AC-3 — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value	30 kW 55 kW 55 kW 90 kW
Thermal short-time current limited to 10 s	1 480 A
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	20 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
Control circuit/ Control	
Type of voltage of the control supply voltage	AC/DC
Control supply voltage at AC	

• at 50 Hz rated value	220 ... 240 V
• at 60 Hz rated value	220 ... 240 V
Control supply voltage at DC	
• rated value	220 ... 240 V
Control supply voltage frequency 1 rated value	50 Hz
Control supply voltage frequency 2 rated value	60 Hz
Operating range factor control supply voltage rated value of 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 magnet coil at DC	0.8 ... 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of magnet coil at AC	300 V·A
Inductive power factor with closing power of the coil	0.9
Apparent holding power of magnet coil at AC	5.8 V·A
Inductive power factor with the holding power of the coil	0.8
Closing power of magnet coil at DC	360 W
Holding power of magnet coil at 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 auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
Design of the fuse link	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	fuse gL/gG: 355 A
— with type of assignment 2 required	fuse gR: 350 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-sections	
• at AWG conductors for main contacts	4 ... 250 kcmil
Type of connectable conductor cross-sections	
• 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)
• at AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12
Certificates/approvals	

General Product Approval				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	spezielle Prüfbescheinigungen

Shipping Approval				other	
 ABS	 DNV	 GL	 RMRS	Umweltbestätigung	sonstig

other
Bestätigungen

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1456-6AP36>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1456-6AP36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1456-6AP36>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1456-6AP36&lang=en

