SIEMENS

Data sheet 3RT1036-1AP00

CONTACTOR, AC-3 22 KW/400 V, AC 230 V, 50 HZ, 3-POLE, SIZE S2, SCREW CONNECTION



Figure similar

product brandname	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S2
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 between coil and main contacts acc. to EN 	400 V
60947-1	
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Shock resistance at rectangular impulse	
• at AC	10g / 5 ms, 5g / 10 ms
Shock resistance with sine pulse	

• at AC	15g / 5 ms, 8g / 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	
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	60 A
• at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	60 A
 up to 690 V at ambient temperature 60 °C rated value 	55 A
• at AC-3	
— at 400 V rated value	50 A
— at 690 V rated value	24 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	16 mm²
• at 40 °C minimum permissible	16 mm²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	24 A
• at 690 V rated value	12.6 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	4.5 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	25 A
• with 3 current paths in series at DC-1	

— at 24 V rated value	55 A
— at 110 V rated value	55 A
Operating current	
at 1 current path at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	55 A
— at 110 V rated value	25 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
Operating power	
• at AC-1	
— at 230 V at 60 °C rated value	22 kW
— at 400 V rated value	38 kW
— at 690 V rated value	66 kW
— at 690 V at 60 °C rated value	66 kW
• at AC-2 at 400 V rated value	22 kW
● at AC-3	
— at 230 V rated value	15 kW
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	22 kW
Operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	12.6 kW
• at 690 V rated value	11.4 kW
Thermal short-time current limited to 10 s	400 A
Power loss [W] at AC-3 at 400 V for rated value of	5 W
the operating current per conductor No-load switching frequency	
• at AC	5 000 1/h
Operating frequency	C 333 III.
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	800 1/h
• at AC-4 maximum	300 1/h
Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
at 50 Hz rated value	230 V

Operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
Apparent pick-up power of magnet coil at AC	145 V·A
Inductive power factor with closing power of the coil	0.79
Apparent holding power of magnet coil at AC	12.5 V·A
Inductive power factor with the holding power of the	0.36
coil	
Closing delay	
• at AC	10 24 ms
Opening delay	
• at AC	7 20 ms
Arcing time	10 15 ms
Auxiliary circuit	
Number of NC contacts	
for auxiliary contacts	
 instantaneous contact 	0
Number of NO contacts	
for auxiliary contacts	
instantaneous contact	0
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
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
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: 160 A
with type of assignment 2 required	fuse gL/gG: 80 A

• for short-circuit protection of the auxiliary switch required

fuse gL/gG: 10 A

Installation/ mounting/ dimensions	
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Side-by-side mounting	Yes
Height	112 mm
Width	55 mm
Depth	115 mm
Required spacing	
• for grounded parts	
— at the side	6 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	
• for main contacts	
— solid	2x (0.75 16 mm²)
— stranded	2x (0.75 25 mm²)
 single or multi-stranded 	2x (0,75 16 mm²)
 finely stranded with core end processing 	2x (0.75 16 mm²)
 finely stranded without core end 	2x (0.75 16 mm²)
processing	
 at AWG conductors for main contacts 	2x (18 2)
Type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• at 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









Type Examination
Certificate



Test Certificates

Shipping Approval

Type Test
Certificates/Test
Report

Special Test Certificate









other

Environmental Confirmations

Confirmation

Miscellaneous

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=3RT1036-1AP00

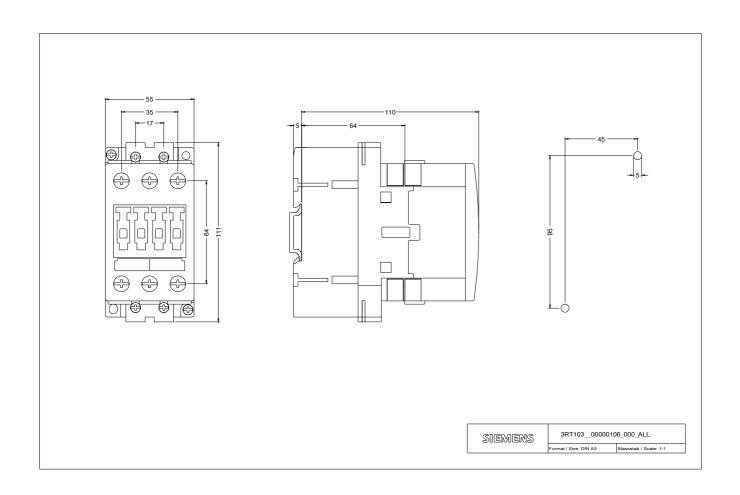
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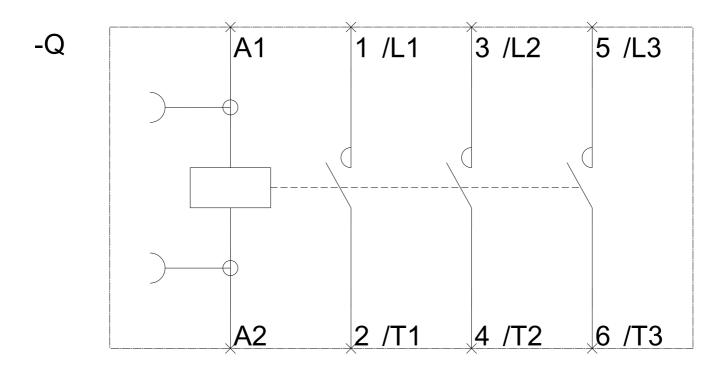
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1036-1AP00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1036-1AP00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1036-1AP00&lang=en





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