SIEMENS

Data sheet 3RT1016-1AP02

CONTACTOR, AC-3 4 KW/400 V, 1 NC, AC 230 V, 50/60 HZ, 3-POLE, SIZE S00, SCREW CONNECTION



Figure similar

Product brand name	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S00
Degree of pollution	3
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Mechanical service life (switching cycles)	
 of contactor typical 	30 000 000
 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

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	22 A
• at AC-1	
 — up to 690 V at ambient temperature 40 °C rated value 	22 A
 up to 690 V at ambient temperature 60 °C rated value 	20 A
• at AC-3	
— at 400 V rated value	9 A
• at AC-4 at 400 V rated value	8.5 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.15 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
Operating power	
● at AC-1	
— at 400 V rated value	13 kW
• at AC-2 at 400 V rated value	4 kW
● at AC-3	
— at 400 V rated value	4 kW
— at 500 V rated value	4.5 kW

— at 690 V rated value	5.5 kW
Power loss [W] at AC-3 at 400 V for rated value of	0.7 W
the operating current per conductor	
Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	230 V
• at 60 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
● at 60 Hz	0.85 1.1
Apparent pick-up power of magnet coil at AC	27 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of magnet coil at AC	4.4 V·A
Inductive power factor with the holding power of the	0.27
coil	
Auxiliary circuit	
Number of NC contacts	
 for auxiliary contacts 	
 instantaneous contact 	1
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

Short-circuit protection

Contact reliability of auxiliary contacts

Design of the fuse link

• for short-circuit protection of the main circuit

1 faulty switching per 100 million (17 V, 1 mA)

 — with type of coordination 1 required 	fuse gL/gG: 35 A
 — with type of assignment 2 required 	fuse gL/gG: 20 A
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A
required	

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	57.5 mm
Width	45 mm
Depth	72 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 (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
 single or multi-stranded 	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 main contacts 	2x (20 16), 2x (18 14), 1x 12
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	
Cortif	iootoc

Marine / Shipping

Special Test
Certificate











Marine / Shipping

other





Environmental Confirmations

Miscellaneous

Confirmation

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=3RT1016-1AP02

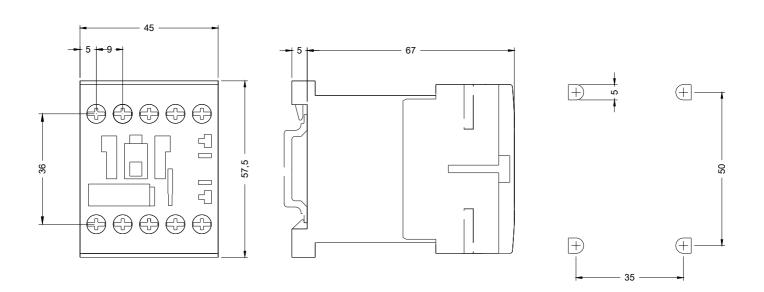
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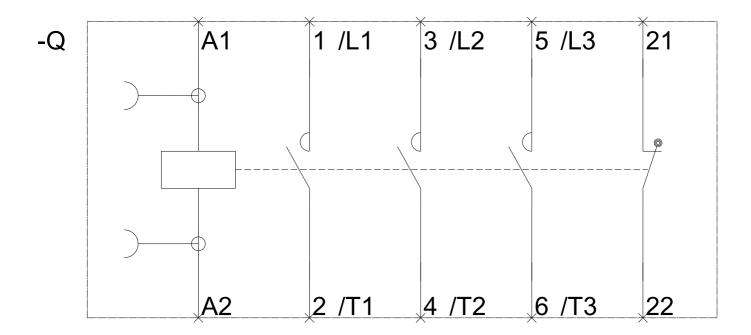
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT1016-1AP02}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1AP02

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1016-1AP02&lang=en





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