SIEMENS

Data sheet 3RT1016-1AP01



CONTACTOR, AC-3, 4KW/400V, 1NO, AC 230V 50/60HZ, 3-POLE, SIZE S00, SCREW TERMINAL

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:	
Size of contactor	S00
Degree of pollution	3
Mechanical service life (switching cycles)	
 of the 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
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
during operation	-25 +60 °C

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	
● 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
— 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	
with 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	
with 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 110 V Rated value	0.35 A
— at 24 V Rated value	20 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	20 A
— at 24 V Rated value	20 A
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor	0.7 W
Control circuit/ Control:	
Type of voltage of the control supply voltage	AC
Control supply voltage with AC	
• at 50 Hz Rated value	230 V
at 60 Hz Rated value	230 V
Rated value	50 Hz
Control supply voltage frequency 2 Rated value	60 Hz
Operating range factor control supply voltage rated value of the magnet coil with AC	
● at 50 Hz	0.8 1.1

● at 60 Hz	0.85 1.1
Apparent pick-up power of the magnet coil with AC	27 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of the magnet coil with AC	4.4 V·A
Inductive power factor with the holding power of the coil	0.27

Auxiliary circuit:	
Number of NC contacts	
 for auxiliary contacts 	
instantaneous contact	0
Number of NO contacts	
 for auxiliary contacts 	
instantaneous contact	1
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 the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

Design of the fuse link

• for short-circuit protection of the main circuit
 — with type of assignment 1 required

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

fuse gL/gG: 20 A 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	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
- for auxiliary and control current circuit

Type of connectable conductor cross-section

- for main contacts
 - solid
 - single or multi-stranded
 - finely stranded with core end processing
- for AWG conductors for main contacts
- Type of connectable conductor cross-section

- for auxiliary contacts
 - solid
 - finely stranded with core end processing
- for AWG conductors for auxiliary contacts

screw-type terminals

screw-type terminals

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), max. 2x (0,75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

Certificates/ approvals:

General Product Approval

Functional Safety/Safety of Machinery











Type Examination

Declaration of Conformity

Test Certificates

Shipping Approval



Special Test Certificate





other





GI

I RS

Shipping Approval







Confirmation

other

Environmental Confirmations

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=3RT10161AP01

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10161AP01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10161AP01&lang=en



