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

i gure 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	0.7 W
the operating current per conductor	
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	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
Contact reliability of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Short-circuit: 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	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 pa 	rts					
— at the side			6 mm			
onnections/ Termin	als:					
ype of electrical con	nection					
 for main current circuit 			screw-type terminals			
 for auxiliary and control current circuit 		screw-type terminals				
ype of connectable of	conductor cross-se	ction				
 for main contact 	S					
— solid			2x (0.5 1.5 mm²), 2x (0.7	′5 2.5 mm²), r	nax. 2x (0.75 4 mm	
— single or multi-stranded		2x (0,5 1,5 mm²), 2x (0,7	′5 2,5 mm²), r	nax. 2x (0,75 4 mm		
— finely stranded with core end processing		2x (0.5 1.5 mm²), 2x (0.7	′5 2.5 mm²)			
 for AWG conductors for main contacts 		2x (20 16), 2x (18 14)	, 1x 12			
ype of connectable of	conductor cross-se	ction				
 for auxiliary con 	tacts					
— solid			2x (0.5 1.5 mm²), 2x (0.7	′5 2.5 mm²), r	nax. 2x (0.75 4 mm	
— finely stranded with core end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
 for AWG conduct 	ctors for auxiliary c	ontacts	2x (20 16), 2x (18 14)	, 1x 12		
	SP:		71 °	EHC	Type Examination	
ccc Declaration of	CSA	UL Shipping /				
Conformity	Certificates	Shipping A	oprova			
CE	Special Test Certificate	ALCAN BUREPC	<mark>ٹگٹ</mark>	GL®	Lloyd's Register	
EG-Konf.		ABS	DNV DNV	GL	LRS	
EG-Konf. Shipping Approva	al	ABS		GL other	LRS	

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/CAX order/default.aspx?lang=en&mlfb=3RT10161AP02

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT10161AP02

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10161AP02&lang=en



