SIEMENS

Data sheet

3RT1015-1AF02

CONTACTOR, AC-3 3 KW/400 V, 1 NC, AC 110 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
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Degree of pollution	3
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:	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-25 +60 °C

Main circuit:	
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	18 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	18 A
— at ambient temperature 60 °C rated value	16 A
• at AC-3	
— at 400 V rated value	7 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	15 A
— at 110 V rated value	1.5 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	15 A
— at 110 V rated value	8.4 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	15 A
— at 110 V rated value	15 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 110 V rated value	0.1 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 110 V rated value	0.25 A
— at 24 V rated value	15 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 110 V rated value	15 A
— at 24 V rated value	15 A
Operating power	
• at AC-1	
— at 400 V rated value	11 kW
• at AC-2 at 400 V rated value	3 kW
• at AC-3	
— at 400 V rated value	3 kW
— at 500 V rated value	3.5 kW
— at 690 V rated value	4 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.42 W

Control circuit/ Control:	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	110 V
• at 60 Hz rated value	110 V
• 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	0.85 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
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Short-circuit protection	
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 required

fuse gL/gG: 10 A

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 mm		
— 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)		
	2x (20 16), 2x (18 14), 1x 12		

General Product	t Approval			Declaration of Conformity	Test Certificates				
CCC	(SA)	EHC		EG-Konf.	spezielle Prüfbescheinigunge <u>n</u>				
Shipping Approv	Shipping Approval								
ABS		GL	Lloyd's Register	PRS	RINA				
Shipping Approval	other								
	Bestätigungen	sonstig	Umweltbestätigung						

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=3RT10151AF02

Cax online generator

http://support.automation.siemens.com/WW/CAX order/default.aspx?lang=en&mlfb=3RT10151AF02

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT10151AF02

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10151AF02&lang=en



