SIEMENS

Data sheet

3RT1517-1AP00

CONTACTOR, AC-3 5.5KW/400 V, AC-1 22 A, AC 230 V, 50 HZ, 4-POLE, 2 NO + 2 NC, SIZE S00, SCREW CONNECTION



Figure similar

product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	S00
Insulation voltage	
 rated value 	690 V
Protection class IP	
• on the front	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
during storage	-55 +80 °C
N	
Main circuit: Number of NO contacts for main contacts	2
Number of NC contacts for main contacts	2
Operating current	-
• 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-2 at AC-3 at 400 V	
- per NO contact rated value	12 A
– per NC contact rated value	12 A
Connectable conductor cross-section in main circuit	
at AC-1	
• at 60 °C minimum permissible	2.5 mm ²
• at 40 °C minimum permissible	2.5 mm ²
Operating current	
 at 1 current path at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
Operating current	
 at 1 current path at DC-3 at DC-5 	
— at 24 V per NC contact rated value	20 A
— at 24 V per NO contact rated value	20 A
— at 110 V per NC contact rated value	0.075 A
— at 110 V per NO contact rated value	0.15 A
— at 220 V per NC contact rated value	0.375 A
— at 220 V per NO contact rated value	0.75 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 110 V per NC contact rated value	0.175 A
— at 110 V per NO contact rated value	0.35 A
— at 24 V per NC contact rated value	20 A
— at 24 V per NO contact rated value	20 A
Operating power	

• at AC-1	
— at 230 V rated value	7.5 kW
— at 400 V rated value	13 kW
• at AC-2 at AC-3	
— at 230 V per NC contact rated value	3 kW
— at 230 V per NO contact rated value	3 kW
— at 400 V per NC contact rated value	5.5 kW
— at 400 V per NO contact rated value	5.5 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.7 W
Operating frequency	
• at AC-1 maximum	1 000 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
• 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
● at 50 Hz	27 V·A
Inductive power factor with closing power of the coil	0.8
• at 50 Hz	0.8
Apparent holding power of magnet coil at AC	4.4 V·A
● at 50 Hz	4.4 V·A
Inductive power factor with the holding power of the coil	0.27
• at 60 Hz	0.27
Closing delay	
• at AC	8 35 ms
• at DC	25 100 ms
Opening delay	
• at AC	4 30 ms
• at DC	7 10 ms
Arcing time	10 15 ms
Control version of the switch operating mechanism	conventional
Residual current of the electronics for control with signal <0>	
• at AC at 230 V maximum permissible	0.003 A
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)

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 position	with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
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

it circuit		oorow typo torminala			
		screw-type terminals			
d control current circ		screw-type terminals			
	tions				
cts		- /	(a =		
				max. 2x (0,75 4 mm²)	
	•				
at AWG conductors for main contacts		2x (20 16), 2x (18 14), 1x 12			
conductor cross-sec	tions				
ntacts					
— solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)			
nulti-stranded		2x (0,5 1,5 mm²), 2x	x (0,75 2,5 mm²),	max. 2x (0,75 4 mm ²)	
nded with core end p	rocessing				
ctors for auxiliary co	ntacts	2x (20 16), 2x (18	. 14), 1x 12		
nd rate acc. to SN 31	920	100 FIT			
Approval				Functional	
				Safety/Safety of Machinery	
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CSA	tHL		UR		
CSA	tHL		GAL UR		
CSA	Shipping A		GAS UR		
Test Certificates	Shipping A		UR		
	Shipping A	pproval			
Certificates	EHL Shipping A	pproval			
Certificates spezielle	CAN BOAR CONTRACT	pproval	Lloyd's Kegister		
Certificates spezielle Prüfbescheinigunge	Shipping A	pproval			
Certificates spezielle Prüfbescheinigunge	CAN BOAR CONTRACT	pproval	Lloyd's Kegister		
Certificates spezielle Prüfbescheinigunge <u>n</u>	CAN BOAR CONTRACT	pproval	Lloyd's Kegister		
Certificates spezielle Prüfbescheinigunge	CAN BOAR CONTRACT	pproval	Lloyd's Kegister		
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Certificates <u>spezielle</u> Prüfbescheinigunge <u>n</u> other	ABS	pproval GL GL	Lloyd's Kegister		
Certificates <u>spezielle</u> Prüfbescheinigunge <u>n</u> other	ABS	pproval GL GL	Lloyd's Kegister		
	cts nulti-stranded nded with core end p ctors for main contac conductor cross-sec ntacts nulti-stranded nded with core end p ctors for auxiliary cor	nulti-stranded nded with core end processing ctors for main contacts conductor cross-sections ntacts nulti-stranded nded with core end processing ctors for auxiliary contacts	cts $2x (0.5 \dots 1.5 \text{ mm}^2), 2)$ nulti-stranded $2x (0.5 \dots 1.5 \text{ mm}^2), 2)$ nded with core end processing ctors for main contacts $2x (0.5 \dots 1.5 \text{ mm}^2), 2)$ $2x (0.5 \dots 1.5 \text{ mm}^2), 2)$ $2x (20 \dots 16), 2x (18 \dots$ conductor cross-sections ntacts $2x (0.5 \dots 1.5 \text{ mm}^2), 2)$ nulti-stranded nded with core end processing ctors for auxiliary contacts $2x (0.5 \dots 1.5 \text{ mm}^2), 2)$ $2x (0.5 \dots 1.5 \text{ mm}^2), 2)$ $2x (20 \dots 16), 2x (18 \dots$ nulti-stranded nded with core end processing ctors for auxiliary contacts $2x (20 \dots 16), 2x (18 \dots$ nulti-stranded nded rate acc. to SN 31920 100 FIT	cts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 1 nulti-stranded 2x (0,5 1,5 mm²), 2x (0.75 2,5 mm²), 1 nded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2,5 mm²), 1 ctors for main contacts 2x (20 16), 2x (18 14), 1x 12 conductor cross-sections 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 1 nulti-stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 1 nulti-stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 1 nulti-stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 1 nded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 1 ctors for auxiliary contacts 2x (20 16), 2x (18 14), 1x 12 med rate acc. to SN 31920 100 FIT	

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=3RT15171AP00

Cax online generator

http://support.automation.siemens.com/WW/CAX order/default.aspx?lang=en&mlfb=3RT15171AP00

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT15171AP00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT15171AP00&lang=en



