SIEMENS

Data sheet

3RT1017-1AP01



CONTACTOR, AC-3 5.5 KW/400 V, 1 NO, AC 230 V, 50/60 HZ, 3-POLE, SIZE S00, SCREW CONNECTION

i igure siriliar	
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 maximum	2 000 m
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

Operating current at AC-1 at 400 V at and bient temperature 40 °C Rated value at AC-1 up to 680 V at AC-3 up to 680 V at ambient temperature 60 °C Rated value at AC-3 at 400 V Rated value at AC-4 at 400 V Rated value at AC-4 at 400 V Rated value at AC-4 value 0 V Rated value AC-4 value 0 V Rated value AC-5 value 0 V Rated value AC-4 value 0 V Rated value AC-4 value 0 V Rated value AC-4 V Rated value AC-4 V Rated value AC-4 value 0 V Rated value AC-4 V Rated value AC-4 V Rated value AC-4 V Rated value AC-4 V Rated value	Number of NO contacts for main contacts	3
at ambient temperature 40 °C Rated value22 A at ambient temperature 60 °C Rated value22 A at ambient temperature 60 °C Rated value20 A- at ado V Rated value12 A- at 400 V Rated value85 AOperating current20 A- at 10 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value0.15 A• with 1 current paths in series at DC-30.35 A- at 110 V Rated value0.35 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A <t< th=""><th>Operating current</th><th></th></t<>	Operating current	
at AC: 1up to 699 V22 A- at ambient temperature 40 °C Rated value22 A- at ambient temperature 60 °C Rated value20 Aat AC-320 A- at 400 V Rated value12 Aat AC-4 at 400 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V R	• at AC-1 at 400 V	
	— at ambient temperature 40 °C Rated value	22 A
Industry particle of CR Reted value20 A• at AC-312 A• at AC-4 at 400 V Rated value85 A• at AC-4 at 400 V Rated value85 A• at AC-4 at 400 V Rated value85 A• at AC-4 at 400 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value0.15 A- at 110 V Rated value0.35 A- at 110 V Rated value0.35 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 10 V Rated value20 A- at 10 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 10 V Rated value20 A- at 10 V Rated value20 A <tr< th=""><th>• at AC-1 up to 690 V</th><th></th></tr<>	• at AC-1 up to 690 V	
 at AC-3 at 400 V Rated value at AC-4 at 400 V Rated value bwith 1 current path at DC-1	— at ambient temperature 40 °C Rated value	22 A
at 400 V Rated value12 A• at AC-4 at 400 V Rated value8.5 AOperating current20 A- at 24 V Rated value20 A- at 10 V Rated value21 A• with 2 current paths in series at DC-1 at 24 V Rated value20 A- at 10 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value0.15 A• with 1 current path at DC-3 at DC-5 at 24 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24	— at ambient temperature 60 °C Rated value	20 A
• at AC-4 at 400 V Rated value8.5 AOperating current• with 1 current path at DC-120 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 124 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20	• at AC-3	
Operating current with 1 current path at DC-1 at 24 V Rated value 20 A at 110 V Rated value 21 A with 2 current paths in series at DC-1 at 24 V Rated value 20 A at 10 V Rated value 20 A at 24 V Rated value 20 A at 110 V Rated value 20 A with 3 current paths in series at DC-1 at 24 V Rated value 20 A with 1 current path at DC-3 at DC-5 at 24 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 110 V Rated value 0.35 A at 110 V Rated value 0.35 A at 124 V Rated value 20 A with 3 current paths in series at DC-3 at DC-5 at 10 V Rated value 20 A at 10 V Rated value 20 A with 3 current paths in series at DC-3 at DC-5 at 10 V Rated value 20 A <	— at 400 V Rated value	12 A
 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 10 V Rated value 20 A at 24 V Rated value 20 A at 10 V Rated value 20 A at 24 V Rated value 20 A at 24 V Rated value 20 A at 24 V Rated value 20 A with 3 current paths in series at DC-1 at 24 V Rated value 20 A Operating current with 1 current path at DC-3 at DC-5 at 10 V Rated value 20 A Outron the paths in series at DC-3 at DC-5 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 110 V Rated value 20 A with 3 current paths in series at DC-3 at DC-5 at 110 V Rated value 20 A with 3 current paths in series at DC-3 at DC-5 at 110 V Rated value 20 A with 3 current paths in series at DC-3 at DC-5 at 10 V Rated value 20 A with 3 current paths in series at DC-3 at DC-5 at 10 V Rated value 20 A current paths in series at DC-3 at DC-5 at 10 V Rated value 20 A current paths in series at DC-3 at DC-5 at 10 V Rated value 20 A current paths in series at DC-3 at DC-5 at 10 V Rated value 20 A current paths in series at DC-3 at DC-5 at 10 V Rated value 20 A current paths in series at DC-3 at DC-5 at 50 Hz Rated value 20 Hz c	• at AC-4 at 400 V Rated value	8.5 A
- at 24 V Rated value20 A- at 110 V Rated value2.1 A• with 2 current paths in series at DC-1- at 24 V Rated value- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 AOperating current20 A- with 1 current path at DC-3 at DC-5- at 24 V Rated value- with 2 current paths in series at DC-3 at DC-5- at 110 V Rated value- with 2 current paths in series at DC-3 at DC-5- at 110 V Rated value- with 2 current paths in series at DC-3 at DC-5- at 110 V Rated value- at 110 V Rated value20 A- at 24 V Rated value20 A-	Operating current	
	 with 1 current path at DC-1 	
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- at 24 V Rated value20 A- at 110 V Rated value12 A• with 3 current paths in series at DC-120 A- at 24 V Rated value20 A- at 110 V Rated value20 AOperating current20 A• with 1 current path at DC-3 at DC-5- at 24 V Rated value- at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-5- at 110 V Rated value- at 110 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5- at 24 V Rated value- at 24 V Rated value20 A- at 25 V Rated value20 V- at 26 V Rat	— at 110 V Rated value	2.1 A
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- at 24 V Rated value20 A- at 110 V Rated value20 AOperating current20 A• with 1 current path at DC-3 at DC-520 A- at 24 V Rated value20 A- at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-50.35 A- at 110 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• at 10 V Rated value20 A- at 24 V Rated value20 A- at 25 V Rated value20 A- at 26 V Rated value230 V• at 50 Hz Rated value230 V• at 60 Hz Rated value50 HzControl supply voltage frequency 2 Rated value60 HzOperating range factor control supply voltage rated60 Hz	— at 110 V Rated value	12 A
	 with 3 current paths in series at DC-1 	
Operating currentImage: control current path at DC-3 at DC-5- at 24 V Rated value20 A- at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-50.35 A- at 110 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.410 V Rated value- at 24 V Rated value20 A- at 50 Hz Rated value230 V- at 50 Hz Rated value230 V- at 60 Hz Rated value50 HzControl supply voltage frequency 2 Rated value60 HzOperating range factor control supply voltage rated60 Hz	— at 24 V Rated value	20 A
 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 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 with 3 current paths in series at DC-3 at DC-5 at 110 V Rated value 20 A with 3 current paths in series at DC-3 at DC-5 at 110 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 1.24 W 2.20 V	— at 110 V Rated value	20 A
- at 24 V Rated value20 A- at 110 V Rated value0.15 A- with 2 current paths in series at DC-3 at DC-50.35 A- at 110 V Rated value20 A- at 24 V Rated value20 A- with 3 current paths in series at DC-3 at DC-50.4- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 25 V Rated value20 A- at 26 V Rated value20 A- at 27 V Rated value20 A- at 27 V Rated value20 A- at 28 V Rated value20 A- at 29 V Rated value20 A- at 20 V Rated value20 A- at 50 Hz Rated value230 V- at 50 Hz Rated value230 V- at 60 Hz Rated value50 Hz- at 60 Hz Rated value50 Hz- at 60 Hz Rated value60 Hz- at 20 V rated value60 Hz	Operating current	
at 110 V Rated value0.15 A- with 2 current paths in series at DC-3 at DC-5	 with 1 current path at DC-3 at DC-5 	
 with 2 current paths in series at DC-3 at DC-5 at 110 V Rated value at 24 V Rated value at 24 V Rated value at 110 V Rated value at 110 V Rated value at 24 V Rated value at 110 V Rated value at 110 V Rated value at 24 V Rated value at 20 A Active power loss at AC-3 at 400 V for rated value of 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 at 60 Hz at 60 Hz Control supply voltage frequency 2 Rated value 60 Hz 	— at 24 V Rated value	20 A
- at 110 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-520 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value1.24 WControl supply voltage of the control supply voltageACControl supply voltage with AC230 V• at 60 Hz Rated value230 V• Rated value50 Hz• Rated value60 HzOperating range factor control supply voltage rated value60 Hz	— at 110 V Rated value	0.15 A
	 with 2 current paths in series at DC-3 at DC-5 	
 with 3 current paths in series at DC-3 at DC-5 at 110 V Rated value 20 A 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 Control circuit/ Control: Control supply voltage of the control supply voltage AC Control supply voltage with AC at 50 Hz Rated value 230 V at 60 Hz 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 110 V Rated value	0.35 A
- at 110 V Rated value20 A- at 24 V Rated value20 AActive power loss at AC-3 at 400 V for rated value of the operating current per conductor1.24 WControl circuit/ Control:	— at 24 V Rated value	20 A
	 with 3 current paths in series at DC-3 at DC-5 	
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W Control circuit/ Control: AC Type of voltage of the control supply voltage AC Control supply voltage with AC 230 V • at 50 Hz Rated value 230 V • at 60 Hz Rated value 50 Hz • Rated value 50 Hz • Rated value 60 Hz Operating range factor control supply voltage rated value 60 Hz	— at 110 V Rated value	20 A
the operating current per conductor Control circuit/ Control: Type of voltage of the control supply voltage Outrol supply voltage with AC Outrol supply voltage with AC Outrol supply voltage frequency 2 Rated value Control supply voltage frequency 2 Rated value Operating range factor control supply voltage rated value of the magnet coil with AC	— at 24 V Rated value	20 A
Control circuit/ Control: AC Type of voltage of the control supply voltage AC Control supply voltage with AC 230 V • at 50 Hz Rated value 230 V • at 60 Hz Rated value 50 Hz • 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 Fated value	-	1.24 W
Type of voltage of the control supply voltage AC Control supply voltage with AC 230 V • 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 60 Hz	the operating current per conductor	
Control supply voltage with AC 230 V • 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 60 Hz	Control circuit/ Control:	
• at 50 Hz Rated value230 V• at 60 Hz Rated value230 V• Rated value50 Hz• Rated value60 HzOperating range factor control supply voltage rated value of the magnet coil with AC60 Hz	Type of voltage of the control supply voltage	AC
• 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 60 Hz	Control supply voltage with AC	
	• at 50 Hz Rated value	230 V
Control supply voltage frequency 2 Rated value 60 Hz Operating range factor control supply voltage rated value of the magnet coil with AC	• at 60 Hz Rated value	230 V
Operating range factor control supply voltage rated value of the magnet coil with AC	Rated value	50 Hz
value of the magnet coil with AC		60 Hz
• at 50 Hz 0.8 1.1		
	● 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	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)
Ne och einer it.	
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
 for short-circuit protection of the auxiliary switch required 	
nstallation/ 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

Required spacing					
 for grounded 	parts				
— at the sid	le		6 mm		
Connections/ Term	ninals:				
Type of electrical co	onnection				
• for main current circuit			screw-type terminals		
 for auxiliary a 	nd control current	circuit	screw-type terminals		
Type of connectable	e conductor cross-	section			
 for main contain 	acts				
— 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	x. 2x (0,75 4 mm²)
— finely stra	anded with core er	nd processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
 for AWG cond 	ductors for main co	ontacts	2x (20 16), 2x (18	14), 1x 12	
Type of connectable	e conductor cross-	-section			
 for auxiliary care 	ontacts				
— solid			2x (0.5 1.5 mm²), 2x	: (0.75 2.5 mm²), max	x. 2x (0.75 4 mm²)
— finely stra	anded with core er	nd processing	2x (0.5 1.5 mm²), 2x	: (0.75 2.5 mm²)	
 for AWG cond 	ductors for auxiliar	y contacts	2x (20 16), 2x (18	14), 1x 12	
Certificates/ approv	vals:				
General Produc	ct Approval			Functional	Declaration of
				Safety/Safety of Machinery	Conformity
CCC	(SA		EHC	Type Examination	EG-Konf.
Test Certificates	Shipping App	proval			
Special Test Certificate	ABS	ĴÅ DNV DNV	GL	Lloyd's Register LRS	PRS
Shipping Appro	val	other			
RINA	RMRS	Environmer Confirmatic		<u>other</u>	

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=3RT10171AP01

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT10171AP01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10171AP01&lang=en



