SIEMENS

Data sheet

3RT2017-1AR62



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 400 V AC, 50 Hz / 400-440 V, 60 Hz, auxiliary contacts: 1 NC, screw terminal, size: S00

product brand name	SIRIUS	
product designation	Power contactor	
product type designation	3RT2	
General technical data		
size of contactor	S00	
product extension		
 function module for communication 	No	
 auxiliary switch 	Yes	
power loss [W] for rated value of the current		
 at AC in hot operating state 	1.5 W	
 at AC in hot operating state per pole 	0.5 W	
 without load current share typical 	6.5 W	
insulation voltage		
 of main circuit with degree of pollution 3 rated value 	690 V	
 of auxiliary circuit with degree of pollution 3 rated value 	690 V	
surge voltage resistance		
 of main circuit rated value 	6 kV	
 of auxiliary circuit rated value 	6 kV	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V	
shock resistance at rectangular impulse		
• at AC	7,3g / 5 ms, 4,7g / 10 ms	
shock resistance with sine pulse		
• at AC	11,4g / 5 ms, 7,3g / 10 ms	
mechanical service life (operating cycles)		
 of contactor typical 	30 000 000	
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000	
 of the contactor with added auxiliary switch block typical 	10 000 000	
reference code according to IEC 81346-2	Q	
Substance Prohibitance (Date)	10/01/2009	
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	
relative humidity minimum	10 %	
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %	
Main circuit		
number of poles for main current circuit	3	

number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
 at AC-3e rated value maximum 	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated	22 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	22 A
— up to 690 V at ambient temperature 60 °C rated	20 A
value	
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-4 at 400 V rated value	8.5 A
• at AC-5a up to 690 V rated value	19.4 A
• at AC-5b up to 400 V rated value	9.9 A
• at AC-6a	7.2 A
— up to 230 V for current peak value n=20 rated value	
— up to 400 V for current peak value n=20 rated value	7.2 A
 up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value 	7.2 A 6.7 A
at AC-6a	0.7 A
 up to 230 V for current peak value n=30 rated value 	4.8 A
— up to 400 V for current peak value n=30 rated value	4.8 A
— up to 500 V for current peak value n=30 rated value	4.8 A
— up to 690 V for current peak value n=30 rated value	4.8 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm ²
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	4.1 A
• at 690 V rated value	3.3 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 60 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
— at 600 V rated value	0.6 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 60 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
— at 600 V rated value	0.7 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
 at 1 current path at DC-3 at DC-5 	

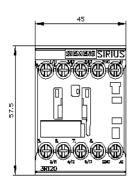
	— at 24 V rated value	20 A
• with 2 current paths in series at BC-3 at DC-5 20 A - at 50 V rated value 20 A - at 10 V rated value 20 A - at 24 V rated value 20 A - at 250 V rated value 22 A - at 250 V rated value 22 A - at 250 V rated value 22 A - at 250 V rated value 55 KW - at 250 V rated value 25 KW - at 400 V rated value 25 KW <td< td=""><td>— at 60 V rated value</td><td>0.5 A</td></td<>	— at 60 V rated value	0.5 A
	— at 110 V rated value	0.15 A
	 with 2 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 20 A - at 24 V rated value 20 A - at 10 V rated value 20 A - at 240 V rated value 02 A - at 240 V rated value 02 A - at 250 V rated value 02 A - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 5 K W - at 250 V rated value 2 K W - at 250 V rated value 2 K W - at 250 V rated value 2 K W - at 250 V rated value n=20 rated value 2 K W - at 250 V for current pack value n=20 rated value 2 K W - at	— at 60 V rated value	5 A
	— at 110 V rated value	0.35 A
	 with 3 current paths in series at DC-3 at DC-5 	
	— at 24 V rated value	20 A
	— at 60 V rated value	20 A
	— at 110 V rated value	20 A
	— at 220 V rated value	1.5 A
operating power at AC-3 at AC-3 at AC-3 at AC-3 at AC-3 bt AC-3 at AC-3 at AC-3 at AC-3 bt AC-4 bt AC-3 ct AC-4 <lict ac-4<="" li=""></lict>	— at 440 V rated value	0.2 A
et AC-3	— at 600 V rated value	0.2 A
et AC-3	operating power	
	— at 230 V rated value	3 kW
	— at 400 V rated value	5.5 kW
et at AC-3e at 230 V rated value 3 KW at 230 V rated value 55 KW at 600 V rated value 55 KW at 600 V rated value 55 KW at 600 V rated value 55 KW at 600 V rated value 55 KW at 600 V rated value 55 KW at 600 V rated value 2 KW at 600 V rated value 2 KW at 600 V rated value 2 KW at 600 V for current peak value n=20 rated value 4 KVA up to 500 V for current peak value n=20 rated value 4 KVA up to 630 V for current peak value n=20 rated value 4 KVA up to 630 V for current peak value n=20 rated value 8 KVA up to 630 V for current peak value n=30 rated value 4 KVA up to 630 V for current peak value n=30 rated value 3 KVA up to 500 V for current peak value n=30 rated value 5 KVA short-time withstand current in cold operating state up to 60 V for current peak value n=30 rated value 5 KVA short-time withstand current maximum 18 KVA stochtime withstand to 10 s switching at zero current maximum 18 KVA sube minimum cross-section acc. to AC-1 rated value 18 KVA at AC-1 maximum at AC-2 maximum at AC-2 maximum at AC-2 maximum at AC-2 maximum 		
		3 kW
at 500 V rated value 5.5 kW operating power for approx. 200000 operating cycles at AC- 4 5.5 kW • at 400 V rated value 2 kW • at 600 V rated value 2.5 kW operating apparent power at AC-5a 2.8 kWA • up to 200 V for current peak value n=20 rated value 4.9 kVA • up to 500 V for current peak value n=20 rated value 5.5 kW operating apparent power at AC-5a 2.8 kVA • up to 500 V for current peak value n=20 rated value 6.2 kVA • up to 500 V for current peak value n=20 rated value 8.4 kVA operating apparent power at AC-5a 1.9 kVA • up to 500 V for current peak value n=30 rated value 3.1 kVA • up to 500 V for current peak value n=30 rated value 3.1 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40° C 40 °C • up to 500 V for current peak value n=30 rated value 5.7 kVA short-time withstand current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • initied to 1s switching at zero current maximum 20 A; Use minimum cross-section acc. to AC-1 rated value • initied to 1s switching at zero current maximum 20 A; Use minimum cross-section acc. to AC-1 rated value • initied to 1s switching at zero current maximum 20 A; Use minimum cross-secti		
operating power for approx. 20000 operating cycles at AC-4 2 • at 400 V rated value 2.5 kW operating apparent power at AC-6a 2.5 kW • up to 230 V for current peak value n=20 rated value 2.8 kVA • up to 500 V for current peak value n=20 rated value 4.9 kVA • up to 500 V for current peak value n=20 rated value 5.8 kVA • up to 500 V for current peak value n=30 rated value 8 kVA operating apparent power at AC-6a 1.9 kVA • up to 500 V for current peak value n=30 rated value 3.3 kVA • up to 500 V for current peak value n=30 rated value 1.9 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA • up to 500 V for current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 123 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 61 A; Use mi		
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• at 690 V rated value 2.5 kW operating apparent power at AC-6a 2.8 kVA • up to 230 V for current peak value n=20 rated value 4.9 kVA • up to 500 V for current peak value n=20 rated value 6.2 kVA • up to 500 V for current peak value n=20 rated value 8.2 kVA • up to 690 V for current peak value n=20 rated value 8.2 kVA • up to 690 V for current peak value n=30 rated value 8.4 VA operating apparent power at AC-6a 1.9 kVA • up to 500 V for current peak value n=30 rated value 3.3 kVA • up to 500 V for current peak value n=30 rated value 3.3 kVA • up to 690 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40 °C 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 21 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 21 A; Use minimum cross-section acc. to AC-1 rated value • at AC 10 000 1/h 10 000 1/h • at AC 10 000 1/h 10 000 1/h • at AC-3 maximum		
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• up to 230 V for current peak value n=20 rated value 4.9 kVA • up to 400 V for current peak value n=20 rated value 4.9 kVA • up to 500 V for current peak value n=20 rated value 6.2 kVA • up to 500 V for current peak value n=20 rated value 6.2 kVA • up to 500 V for current peak value n=20 rated value 7 operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value 1.9 kVA • up to 500 V for current peak value n=30 rated value 1.9 kVA • up to 500 V for current peak value n=30 rated value 1.9 kVA • up to 500 V for current peak value n=30 rated value 4.1 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum * limited to 1 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * dr C * at AC- *	• at 690 V rated value	2.5 kW
• up to 230 V for current peak value n=20 rated value 4.9 kVA • up to 400 V for current peak value n=20 rated value 4.9 kVA • up to 500 V for current peak value n=20 rated value 6.2 kVA • up to 500 V for current peak value n=20 rated value 6.2 kVA • up to 500 V for current peak value n=20 rated value 7 operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value 1.9 kVA • up to 500 V for current peak value n=30 rated value 1.9 kVA • up to 500 V for current peak value n=30 rated value 1.9 kVA • up to 500 V for current peak value n=30 rated value 4.1 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum * limited to 1 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * dr C * at AC- *	operating apparent power at AC-6a	
• up to 400 V for current peak value n=20 rated value 4.9 kVA • up to 500 V for current peak value n=20 rated value 6.2 kVA • up to 690 V for current peak value n=20 rated value 8 kVA operating apparent power at AC-6a 1.9 kVA • up to 500 V for current peak value n=30 rated value 3.3 kVA • up to 500 V for current peak value n=30 rated value 3.3 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40° C 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 96 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 74 A; Use minimum cross-section acc. to AC-1 rated value • limited to 50 s switching at zero current maximum 10 000 1/h • do C 10 000 1/h operating frequency • at AC-1 maximum • at AC-1 maximum 1000 1/h • at AC-2 maximum 750 1/h • at AC-3 maximum 250 1/h • at AC-4 maximum 250 1/h • at AC-4 maximum 250 1/h	• up to 230 V for current peak value n=20 rated value	2.8 kVA
• up to 500 V for current peak value n=20 rated value • up to 630 V for current peak value n=20 rated value 8 kVA operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value 1.9 kVA • up to 400 V for current peak value n=30 rated value 1.9 kVA • up to 500 V for current peak value n=30 rated value 4.1 kVA • up to 680 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching at zero current maximum • limited to 8 s switching frequency • at AC 10 000 1/h • at AC-4 maximum • at AC-4 maximum • at AC-3 maximum • at AC-4 maximum • a		4.9 kVA
• up to 690 V for current peak value n=20 rated value 8 kVA operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value 3.3 kVA • up to 500 V for current peak value n=30 rated value 3.3 kVA • up to 500 V for current peak value n=30 rated value 4.1 kVA • up to 690 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum 123 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • at AC- 10 000 1/h • at AC-2 maximum • at AC-3 maximum 1 000 1/h • at AC-3 maximum 1 000 1/h • at AC-4 maximum 250 1/h • at AC-4 maximum z50 1/h • at AC-4 maximum z50 1/h • at AC-4 maximum ±		6.2 kVA
operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value 1.9 kVA up to 400 V for current peak value n=30 rated value 3.3 kVA up to 590 V for current peak value n=30 rated value 4.1 kVA up to 590 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40°C limited to 1 s switching at zero current maximum 123 A; Use minimum cross-section acc. to AC-1 rated value limited to 30 s switching at zero current maximum g6A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum f1A; Use minimum cross-section acc. to AC-1 rated value e limited to 60 s switching at zero current maximum f1A; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency e at AC 10 000 1/h operating frequency e at AC-1 maximum 1 000 1/h e at AC-3 maximum 750 1/h e at AC-4 maximum 750 1/h e at AC-3 maximum 750 1/h e at AC-3 maximum 750 1/h		
 up to 230 V for current peak value n=30 rated value 1.9 kVA up to 400 V for current peak value n=30 rated value 3.3 kVA up to 500 V for current peak value n=30 rated value 4.1 kVA up to 690 V for current peak value n=30 rated value 5.7 kVA Short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value limited to 15 s switching at zero current maximum Switching at zero current maximum A, Use minimum cross-section acc. to AC-1 rated value limited to 30 s switching at zero current maximum A, Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum A, Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum A, Use minimum cross-section acc. to AC-1 rated value at AC-1 maximum at AC-1 maximum at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-4 maximum		
• up to 400 V for current peak value n=30 rated value 3.3 kVA • up to 500 V for current peak value n=30 rated value 4.1 kVA • up to 690 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40°C 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 5 s switching at zero current maximum 123 A; Use minimum cross-section acc. to AC-1 rated value • limited to 3 s switching at zero current maximum 96 A; Use minimum cross-section acc. to AC-1 rated value • limited to 3 s switching at zero current maximum 96 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value • at AC 10 000 1/h operating frequency 10 000 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-4 maximum 200 1/h Control circuit/ Control Uto V • at AC-4 maximum 400		1.9 kVA
• up to 500 V for current peak value n=30 rated value4.1 kVA• up to 690 V for current peak value n=30 rated value5.7 kVAshort-time withstand current in cold operating state up to 40 °C200 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum123 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum96 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum96 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• at AC00 000 1/h• operating frequency• at AC-1• at AC-3 maximum750 1/h• at AC-3 maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/h• control supply voltage at AC400 V<		
• up to 690 V for current peak value n=30 rated value5.7 kVAshort-time withstand current in cold operating state up to 40 °C200 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1s switching at zero current maximum123 A; Use minimum cross-section acc. to AC-1 rated value• limited to 50 s switching at zero current maximum96 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• at AC10 000 1/h• at AC-1 maximum100 01 /h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum250 1/h• control supply voltage at ACAC• control supply voltage at ACAC• at 50 Hz rated valueAC• at 50 Hz rated value400 V• at 60 Hz rated value440 V• operating range factor control supply voltage rated value of magnet coil at AC440 V		
short-time withstand current in cold operating state up to 40 °C 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 123 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 96 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 74 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 74 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value • at AC 10 000 1/h • at AC 10 000 1/h • at AC-1 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-4 maximum 250 1/h Control circuit/ Control 400 V • at 50 Hz rated value 400 V • at 60 Hz rated value 400 V • at 60 Hz rated value 400 V		
40 °C• limited to 1 s switching at zero current maximum200 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum123 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum96 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum96 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 61 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 62 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 63 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• at AC10 000 1/h• at AC10 000 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ ControlV• at AC-4 maximum400 V• at 50 Hz rated value400 V• at 60 Hz rated value440 V• operating range factor contr	· · · · · · · · · · · · · · · · · · ·	
• limited to 5 s switching at zero current maximum123 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum96 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching frequency61 A; Use minimum cross-section acc. to AC-1 rated value• at AC10 000 1/hoperating frequency1 000 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximum4AC• at AC-4 maximum4AC• at AC-4 maximum4AC• at AC-4 maximum4AC• at AC-4 maximum250 1/h• at AC-4 maximum4AC• at AC-4 maximum4AC• at AC-4 maximum4AC• at 50 Hz rated value400 V• at 60 Hz rated value440 V• operating range factor control supply voltage rated value of magnet coil at AC440 V		
 limited to 10 s switching at zero current maximum 96 A; Use minimum cross-section acc. to AC-1 rated value limited to 30 s switching at zero current maximum 74 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency at AC 10 000 1/h operating frequency at AC-1 maximum 1 000 1/h at AC-2 maximum 1 000 1/h at AC-3 maximum 750 1/h at AC-3 maximum 750 1/h at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage AC control supply voltage at AC at 60 Hz rated value 400 V at 60 Hz rated value 400 V at 60 Hz rated value at AC 	 limited to 1 s switching at zero current maximum 	200 A; Use minimum cross-section acc. to AC-1 rated value
 Iimited to 30 s switching at zero current maximum Iimited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 62 01 /h 60 rated value 60 V 61 60 Hz rated value 61 Hz rated value 61 A; Use minimum cross-section acc. to AC 61 Hz rated value 61 A; Use minimum cross-section acc. to account of supply voltage rated value of magnet coil at AC 	 limited to 5 s switching at zero current maximum 	123 A; Use minimum cross-section acc. to AC-1 rated value
 Iimited to 30 s switching at zero current maximum Iimited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 62 01 /h 60 rated value 60 V 61 60 Hz rated value 61 Hz rated value 61 A; Use minimum cross-section acc. to AC 61 Hz rated value 61 A; Use minimum cross-section acc. to account of supply voltage rated value of magnet coil at AC 	 limited to 10 s switching at zero current maximum 	96 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency 10 000 1/h • at AC 10 000 1/h operating frequency 1 000 1/h • at AC-1 maximum 1 000 1/h • at AC-2 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-4 maximum 250 1/h • at AC-4 maximum 250 1/h Control circuit/ Control AC type of voltage of the control supply voltage AC • at 50 Hz rated value 400 V • at 60 Hz rated value 440 V operating range factor control supply voltage rated value of magnet coil at AC 440 V	 limited to 30 s switching at zero current maximum 	74 A; Use minimum cross-section acc. to AC-1 rated value
• at AC10 000 1/hoperating frequency.• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlACtype of voltage of the control supply voltageAC• at 50 Hz rated value400 V• at 60 Hz rated value440 Voperating range factor control supply voltage rated value of magnet coil at AC	-	
• at AC10 000 1/hoperating frequency.• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlACtype of voltage of the control supply voltageAC• at 50 Hz rated value400 V• at 60 Hz rated value440 Voperating range factor control supply voltage rated value of magnet coil at AC	no-load switching frequency	
• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-3e maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlKtype of voltage of the control supply voltageAC• at 50 Hz rated value400 V• at 60 Hz rated value440 V• operating range factor control supply voltage rated value of magnet coil at ACK		10 000 1/h
• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-3e maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlKtype of voltage of the control supply voltageAC• at 50 Hz rated value400 V• at 60 Hz rated value440 V• operating range factor control supply voltage rated value of magnet coil at ACK	operating frequency	
• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlAC• otrol supply voltage at ACAC• at 50 Hz rated value400 V• at 60 Hz rated value440 V• operating range factor control supply voltage rated value of magnet coil at ACAC		1 000 1/h
• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlAC• otrol supply voltage at ACAC• at 50 Hz rated value400 V• at 60 Hz rated value440 V• operating range factor control supply voltage rated value of magnet coil at ACAC	• at AC-2 maximum	750 1/h
• at AC-3e maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ Control250 1/hControl circuit/ ControlACcontrol supply voltage at ACAC• at 50 Hz rated value400 V• at 60 Hz rated value440 Voperating range factor control supply voltage rated value of magnet coil at ACImage factor control supply voltage rated value of magnet coil at AC		
• at AC-4 maximum250 1/hControl circuit/ Controltype of voltage of the control supply voltageACcontrol supply voltage at AC• at 50 Hz rated value400 V• at 60 Hz rated value440 Voperating range factor control supply voltage rated value of magnet coil at AC	• at AC-3e maximum	750 1/h
Control circuit/ Control type of voltage of the control supply voltage AC control supply voltage at AC 400 V • at 50 Hz rated value 400 V • at 60 Hz rated value 440 V operating range factor control supply voltage rated value of magnet coil at AC 400 V		
type of voltage of the control supply voltage AC control supply voltage at AC 400 V • at 50 Hz rated value 400 V • at 60 Hz rated value 440 V operating range factor control supply voltage rated value of magnet coil at AC 440 V		
control supply voltage at AC 400 V • at 50 Hz rated value 400 V • at 60 Hz rated value 440 V operating range factor control supply voltage rated value of magnet coil at AC 400 V		AC
• at 50 Hz rated value • at 60 Hz rate		
• at 60 Hz rated value 440 V operating range factor control supply voltage rated value of magnet coil at AC		400 V
operating range factor control supply voltage rated value of magnet coil at AC		
-	operating range factor control supply voltage rated value of	
		0.8 1.1

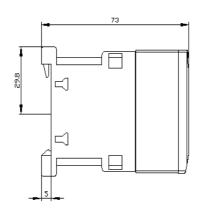
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	36 VA
• at 60 Hz	43 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.8
• at 60 Hz	0.8
apparent holding power of magnet coil at AC	
• at 50 Hz	5.9 VA
• at 60 Hz	6.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.24
• at 60 Hz	0.25
closing delay	
• at AC	9 35 ms
opening delay	
• at AC	4 15 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	10 A
at 400 V rated value	3 A
at 500 V rated value	2 A
at 690 V rated value	1A
operational current at DC-12	
at 24 V rated value	10 A
at 48 V rated value	6 A
at 60 V rated value	6 A
at 110 V rated value	3 A
at 125 V rated value	2 A
at 220 V rated value	1A
at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	10 A
at 48 V rated value	2 A
at 40 V rated value	2 A
at 110 V rated value	1A
at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	11 A
at 600 V rated value	11 A
yielded mechanical performance [hp]	
for single-phase AC motor	
- at 110/120 V rated value	0.5 hp
— at 230 V rated value	2 hp
• for 3-phase AC motor	
- at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	7.5 hp
— at 575/600 V rated value	10 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
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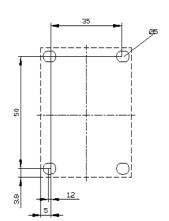
• for short-circuit protection of the main circuit	
 — with type of coordination 1 required 	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
- with type of assignment 2 required	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
 side-by-side mounting 	Yes
height	58 mm
width	45 mm
depth	73 mm
required spacing	
with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts for used	10 mm
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm 10 mm
— downwards	
● for live parts — forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
 of magnet coil 	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), 2x 4 mm²
 solid or stranded 	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
• stranded	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12
AWG number as coded connectable conductor cross section	
• for main contacts	20 12
 for auxiliary contacts 	20 12
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %

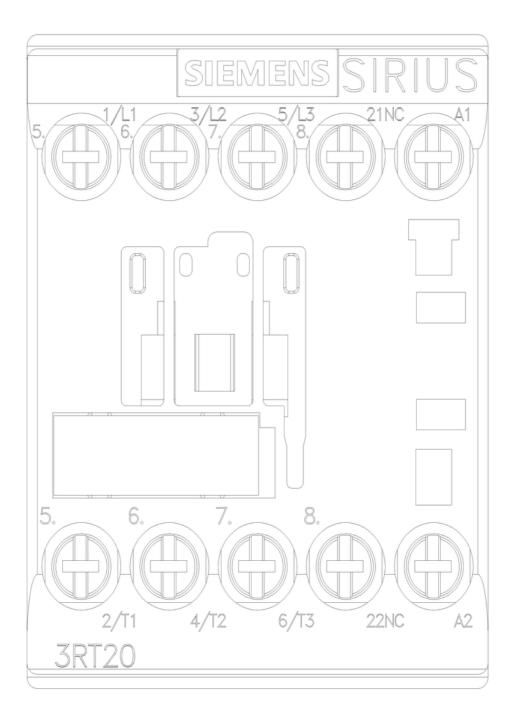
failure rate [FIT] with lo	ow demand rate according	to SN 31920	100 FIT			
T1 value for proof test 61508	T1 value for proof test interval or service life according to IEC		20 a			
protection class IP o	n the front according to I	EC 60529	IP20			
touch protection on	the front according to IEC	60529	finger-safe	e, for vertical contac	t from the front	
suitability for use						
 safety-related st 	witching OFF		Yes			
Certificates/ approvals	;					
General Product App	proval					
(SP) M		<u>Confirmatio</u>	<u>20</u>	UL UL	KC	EHC
EMC	Functional Safety/Safety of Ma- chinery	Declaration of	Conformity	,	Test Certificates	
RCM	Type Examination Cer- tificate	UK CA		CE EG-Konf.	Special Test Certific- ate	Type Test Certific- ates/Test Report
Marine / Shipping						
ABS	BUREAU VERITAS			Llovd's Register us	PRS	RINA
Marine / Shipping	other				Railway	Environment
RMRS	<u>Confirmation</u>	UDE VDE	>	<u>Confirmation</u>	Vibration and Shock	<u>Environmental Con-</u> firmations
Further information	d to ovit the Pussian mark					

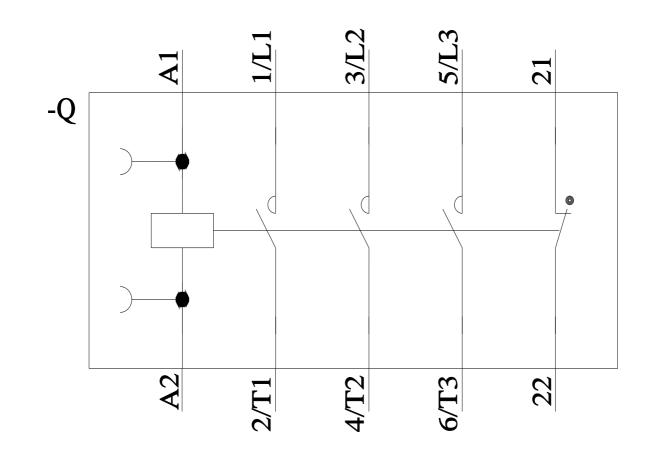
Siemens has decided to exit the Russian market (see here).
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
Siemens is working on the renewal of the current EAC certificates.
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an
EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information- and Downloadcenter (Catalogs, Brochures,)
https://www.siemens.com/ic10
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2017-1AR62
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1AR62
Service&Support (Manuals, Certificates, Characteristics, FAQs,)
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AR62
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1AR62⟨=en
Characteristic: Tripping characteristics, I ² t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AR62/char
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1AR62&objecttype=14&gridview=view1











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