SIEMENS

Data sheet

3RT2017-4LB42



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 24 V DC, 0.7-1.25* Us, with integrated varistor, auxiliary contacts: 1 NC, ring cable lug connection, size: S00

product brand name	SIRIUS		
product designation	Coupling contactor		
product type designation	3RT2		
General technical data			
size of contactor	\$00		
product extension			
function module for communication	No		
auxiliary switch	No		
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 	2.8 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 DC	7.3g / 5 ms, 4.7g / 10 ms		
shock resistance with sine pulse			
• at DC	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	
 — up to 230 V for current peak value n=20 rated value 	7.2 A
 — 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 	7.2 A
— up to 690 V for current peak value n=20 rated value	6.7 A
● at AC-6a	
 — 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 Yinde value - at 32 Vinde value - at 34 Yinde value 20A - at 35 Yinde value 25 KW - at 350 Yinde value 25		
	— at 24 V rated value	20 A
• with 2 current path is series at DC-3 at DC-6 20 A - at 20 V rated value 5A - at 10 V rated value 5A - at 24 V rated value 20 A - at 240 V rated value 55 KW - at 240 V rated value 55 KW - at 250 V rated value 55 KW - at 260 V rated value 26 KW	— 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-320 A- at 24 V rated value20 A- at 260 V rated value20 A- at 210 V rated value20 A- at 240 V rated value20 A- at 240 V rated value0.2 A- at 230 V rated value5.5 kW- at 240 V rated value5.5 kW- at 240 V rated value5.5 kW- at 250 V rated value5.5 kW- at 260 V rated value2.5 kWOperating power for approx 20000 operating cycles at AC-3- at 260 V rated value2.8 kVA- at 260 V rated value2.8 kVA- at 260 V rated value2.8 kVA- at 260 V fract rate at 26 a	— 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
	— at 440 V rated value	0.2 A
operating power 5.5 kW • at AC-2 at 400 V rated value 5.5 kW • at AC-3		
• at AC-2 at 400 V rated value 5.5 kW • at AC-3 3 kW - at 230 V rated value 5.5 kW - at 600 V rated value 5.5 kW operating power for approx. 20000 operating cycles at AC-4 5.6 kW • at 400 V rated value 2.5 kW operating apparent power at AC-48 2.8 kVA • up to 600 V for current pack value n=20 rated value 6.2 kVA • up to 600 V for current pack value n=20 rated value 8 kVA operating apparent power at AC-48 1.9 kVA • up to 600 V for current pack value n=20 rated value 3.3 kVA • up to 600 V for current pack value n=30 rated value 3.3 kVA • up to 600 V for current pack value n=30 rated value 5.7 kW operating apparent power at AC-84 1.9 kVA • up to 600 V for current pack value n=30 rated value 5.7 kW • up to 600 V for current pack value n=30 rated value 5.7 kW • up to 600 V for current pack value n=30		
• at AC-3 3 kW - at 230 V rated value 3 kW - at 500 V rated value 55 kW - at 500 V rated value 55 kW - at 230 V rated value 55 kW - at 230 V rated value 55 kW - at 230 V rated value 55 kW - at 200 V rated value 55 kW - at 500 V rated value 55 kW - at 500 V rated value 55 kW - at 600 V rated value 55 kW - at 600 V rated value 55 kW - at 600 V rated value 25 kW operating power for approx. 20000 operating cycles at AC-6 25 kW • at 600 V rated value 25 kW • up to 500 V for current peak value n=20 rated value 28 kVA • up to 500 V for current peak value n=20 rated value 52 kVA • up to 500 V for current peak value n=20 rated value 52 kVA • up to 500 V for current peak value n=30 rated value 53 kVA • up to 500 V for current peak value n=30 rated value 53 kVA • up to 500 V for current peak value n=30 rated value 57 kVA • up to 500 V for current peak value n=30 rated value 57 kVA • up to 500 V for current peak value n=30 rated value<		5.5 kW
		3 kW
• al AC-3e 3 kW - af 230 V reled value 3 kW - at 400 V rated value 5.5 kW - at 600 V rated value 5.5 kW • at 400 V rated value 2.5 kW • at 600 V rated value 2.5 kW • at 600 V for current pack value n=20 rated value 2.8 kVA • up to 520 V for current pack value n=20 rated value 6.2 kVA • up to 500 V for current pack value n=20 rated value 6.2 kVA • up to 500 V for current pack value n=20 rated value 3.3 kVA • up to 500 V for current pack value n=30 rated value 3.3 kVA • up to 500 V for current pack value n=30 rated value 3.3 kVA • up to 500 V for current pack value n=30 rated value 5.7 kVA • short-line withstand current in cold operating state up to 500 v for current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 19 s witching at zero current maximum 90 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 10000 1/h • at AC-1 maximum		
		3 kW
operating power for approx. 200000 operating cycles at AC-4 • at 400 V rated value 2 kW • at 690 V rated value 2.5 kW operating apparent power at AC-5a 2.8 kVA • 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 5.2 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 8 kVA operating apparent power at AC-6a 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 1.9 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 102 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 1A; Use minimum cross-section acc. to AC-1 rated value • inimited to 10 s switching at zero current maximum 1A; Use minimum cross-section acc. to AC-1 rated value • it AC-3 maximum 1A; Use minimum cross		
		0.0 KW
• 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 5.2 kVA • up to 500 V for current peak value n=20 rated value 8. kVA operating apparent power at AC-6a 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 3.8 kVA • up to 600 V for current peak value n=30 rated value 3.8 kVA • up to 600 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 1s switching at zero current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1s switching at zero current maximum 96 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1s switching at zero current maximum 10 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1s switching at zero current maximum 10 A; Use minimum cross-section acc. to AC-1 rated value • at AC-1 maximum 10 000 1/h • at AC-1 maximu		
operating apparent power at AC-6a 2.8 kVA • 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 6.2 kVA • up to 500 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 3.8 kVA • up to 500 V for current peak value n=30 rated value 3.8 kVA • up to 500 V for current peak value n=30 rated value 3.8 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 123 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 64 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 • at DC 10 000 1/h 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 400 V rated value	2 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 8.VA operating apparent power at AC-6a • 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 1.9 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 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 • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 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 • loo 10 000 1/h • at DC • at DC • at DC • at DC • at AC-1 maximum • at AC-3 maximum • at AC-4 maximum • at AC-	• at 690 V rated value	2.5 kW
• up to 400 V for current peak value n=20 rated value • 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 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 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 690 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 • limited to 1 s switching at zero current maximum ilmited to 5 s switching at zero current maximum ilmited to 50 s switching at zero current maximum for 40 °C 10 000 1/h ilmited to 50 s switching at zero current maximum fol A; Use minimum cross-section acc. to AC-1 rated value ilmited to 60 s switching at zero current maximum fol A; Use minimum cross-section acc. to AC-1 rated value ilmited to 50 s switching at zero current maximum fol A; Use minimum cross-section acc. to AC-1 rated value ilmited to 60 s switching at zero current maximum fol A; Use minimum cross-section acc. to AC-1 rated value ilmited to 50 s switching at zero current maximum fol A; Use minimum cross-section acc. to AC-1 rated value ilmited to 60 s switching at zero current maximum fol 000 1/h operating frequency • 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	operating apparent power at AC-6a	
• up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 230 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current neak value n=30 rated value • thort.time withstand current in cold operating state up to • af of C • limited to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 50 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 • ta AC-4 maximum • ta A	 up to 230 V for current peak value n=20 rated value 	2.8 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 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 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 204 °C • limited to 10 s switching at zero current maximum 96 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 10 s switching at zero current maximum 16 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 14 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 10 000 1/h operating frequency • at AC-1 maximum • at DC 10 000 1/h operating frequency • at AC-2 maximum • at AC-3 maximum 150 1/h	 up to 400 V for current peak value n=20 rated value 	4.9 kVA
operating apparent power at AC-6a 1.9 kVA • up to 230 V for current peak value n=30 rated value 3.3 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 600 V for current peak value n=30 rated value 5.7 kVA short-time withstand current in cold operating state up to 40° C 5.7 kVA • limited to 1 s switching at zero current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 96 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 61 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 • 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 250 1/h Control circuit/ Control 260 1/h Control circuit/ Control<	 up to 500 V for current peak value n=20 rated value 	6.2 kVA
• 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 5.7 kVA short-time withstand current in cold operating state up to 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 204 k; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 74 k; 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 74 A; Use minimum cross-section acc. to AC-1 rated value • at AC-1 maximum 1 0 000 1/h • at AC-1 maximum 1 0 000 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 DC control supply voltage at DC	 up to 690 V for current peak value n=20 rated value 	8 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 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 96 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 14 V Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 14 V Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 14 V Use minimum cross-section acc. to AC-1 rated value • at DC 10 000 1/h • at AC-1 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 <	operating apparent power at AC-6a	
• 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 1s switching at zero current maximum123 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1s 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 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 frequency00 000 1/h• at DC10 000 1/h• at AC-1 maximum1000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ Control250 1/hControl supply voltage at DCDC• rated value24 V• operating range factor control supply voltage rated value of24 V	 up to 230 V for current peak value n=30 rated value 	1.9 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 maximum200 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 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 DC10 000 1/hoperating frequency10000 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• control supply voltage at DCDC• control supply voltage at DC24 V• operating range factor control supply voltage rated value of magnet coil at DC24 V	 up to 400 V for current peak value n=30 rated value 	3.3 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 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 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 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 74 A; Use minimum cross-section acc. to AC-1 rated value • at DC 10 000 1/h • at DC 10 000 1/h • at AC-1 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 250 1/h type of voltage of the control supply voltage DC • rated value 24 V • operating range factor control supply voltage rated	 up to 500 V for current peak value n=30 rated value 	4.1 kVA
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 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 DC10 000 1/hoperating frequency10 000 1/h• at AC-1 maximum1000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ ControlDCtype of voltage of the control supply voltageDC• rated value24 Voperating range factor control supply voltage rated value of magnet coil at DC24 V	 up to 690 V for current peak value n=30 rated value 	5.7 kVA
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 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 DC10 000 1/hoperating frequency10 000 1/h• at AC-1 maximum1000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ ControlDCtype of voltage of the control supply voltageDC• rated value24 Voperating range factor control supply voltage rated value of magnet coil at DC24 V		
• 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 DC10 000 1/hoperating frequency10 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 maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/h• control supply voltageDC• control supply voltage at DC24 V• control supply voltage rated value of magnet coil at DC		
 Iimited to 10 s switching at zero current maximum 96 A; Use minimum cross-section acc. to AC-1 rated value Iimited to 30 s switching at zero current maximum 74 A; Use minimum cross-section acc. to AC-1 rated value Iimited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value Iimited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value Iimited to 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value Iomotoad switching frequency at DC 10 000 1/h operating frequency at AC-1 maximum 1000 1/h at AC-2 maximum 50 1/h at AC-3 maximum 50 1/h at AC-3 maximum 50 1/h at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage C control supply voltage at DC rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 	 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 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 10 000 1/h • at DC 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-4 maximum 250 1/h Control circuit/ Control DC type of voltage of the control supply voltage DC • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 24 V	 limited to 5 s switching at zero current maximum 	
• 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 DC 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 250 1/h • at AC-4 maximum 250 1/h • at AC-4 maximum 250 1/h Control circuit/ Control DC type of voltage of the control supply voltage DC • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 24 V	 limited to 10 s switching at zero current maximum 	96 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency 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-3e maximum 750 1/h • at AC-3e maximum 750 1/h • at AC-4 maximum 250 1/h • at AC-4 maximum 250 1/h • at AC-4 maximum 250 1/h Control circuit/ Control DC type of voltage of the control supply voltage DC • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 24 V	 limited to 30 s switching at zero current maximum 	74 A; Use minimum cross-section acc. to AC-1 rated value
• at DC10 000 1/hoperating frequency1• at AC-1 maximum1 000 1/h• at AC-1 maximum750 1/h• at AC-2 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/ ControlDCtype of voltage of the control supply voltageDC• rated value24 V• perating range factor control supply voltage rated value of magnet coil at DC	 limited to 60 s switching at zero current maximum 	61 A; Use minimum cross-section acc. to AC-1 rated value
operating frequency1000 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-4 maximum250 1/h• at AC-4 maximum250 1/h• control circuit/ ControlDCControl circuit/ Control supply voltageDC• rated value24 V• perating range factor control supply voltage rated value of magnet coil at DC24 V	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 maximumDCControl circuit/ ControlDCcontrol supply voltage at DCPC• rated value24 Voperating range factor control supply voltage rated value of magnet coil at DCControl circuit DC	• at DC	10 000 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/hControl circuit/ ControlDCcontrol supply voltage at DC• rated value24 V• rated value24 V	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/ ControlDCtype of voltage of the control supply voltageDC• rated value24 Voperating range factor control supply voltage rated value of magnet coil at DCImagnet coil at DC	● at AC-1 maximum	1 000 1/h
• at AC-3e maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ ControlDCtype of voltage of the control supply voltage at DC • rated valueDC• rated value24 V	• at AC-2 maximum	750 1/h
• at AC-4 maximum 250 1/h Control circuit/ Control DC type of voltage at DC DC • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC Example factor control supply voltage rated value of magnet coil at DC	• at AC-3 maximum	750 1/h
Control circuit/ Control type of voltage of the control supply voltage DC control supply voltage at DC 24 V • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 24 V	• at AC-3e maximum	750 1/h
type of voltage of the control supply voltage DC control supply voltage at DC 24 V • rated value 24 V	• at AC-4 maximum	250 1/h
control supply voltage at DC • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 24 V	Control circuit/ Control	
• rated value 24 ∨ operating range factor control supply voltage rated value of magnet coil at DC	type of voltage of the control supply voltage	DC
operating range factor control supply voltage rated value of magnet coil at DC	control supply voltage at DC	
magnet coil at DC	rated value	24 V
• initial value 0.7		
	initial value	0.7

• full-scale value	1.25
design of the surge suppressor	with varistor
closing power of magnet coil at DC	2.8 W
holding power of magnet coil at DC	2.8 W
closing delay	
• at DC	25 130 ms
opening delay	
• at DC	7 20 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NO contacts for auxiliary contacts instantaneous	1
contact	
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	1 A
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 60 V rated value	2 A
at 100 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	
 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

RCM		EG-Konf.				
	<u>Type Examination Cer-</u> <u>tificate</u>	CE	Ľ	K	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report
EMC	Functional Safety/Safety of Ma- chinery	Declaration of	Conformity		Test Certificates	
CSA	ccc					LIIL
Æ		<u>Confirmatio</u>	• (Ŀ	KC	EHC
General Product Appr	oval					
ertificates/ approvals						
 safety-related swi 	itching OFF		Yes			
suitability for use						
61508	the front according to II	-	IP00			
T1 value for proof test in	v demand rate according t nterval or service life acco		100 FIT 20 a			
	I rate according to SN 319		73 %			
	rate according to SN 319		40 % 73 %			
proportion of dangero		20	40.94			
	nand rate according to SN	131920	1 000 000			
	cording to IEC 60947-4-1	124020	Yes			
product function			N			
afety related data						
of magnet coil			Ring cable lug co	nnection		
at contactor for at	uxiliary contacts		Ring cable lug co			
 for auxiliary and c 			ring terminal lug o			
• for main current c			Ring cable lug co			
type of electrical conn						
onnections/ Terminals				_		_
— at the side			6 mm			
- downwards			10 mm			
— upwards			10 mm			
— forwards			10 mm			
 for live parts 						
— downwards			10 mm			
— at the side			6 mm			
— upwards			10 mm			
- forwards			10 mm			
 for grounded part 	s					
— at the side			0 mm			
— downwards			10 mm			
— upwards			10 mm			
— forwards			10 mm			
 with side-by-side 	mounting					
required spacing						
depth			73 mm			
width			45 mm			

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Further information

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=3RT2017-4LB42

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-4LB42

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-4LB42

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

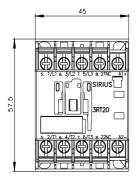
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-4LB42&lang=en

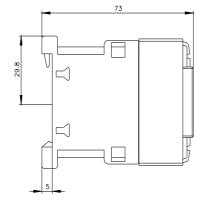
Characteristic: Tripping characteristics, I2t, Let-through current

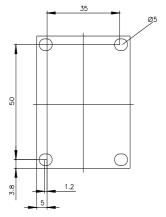
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-4LB42/char

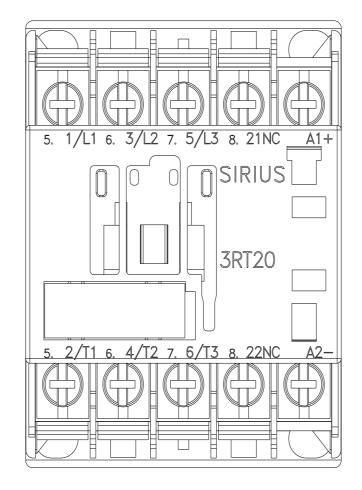
Further characteristics (e.g. electrical endurance, switching frequency)

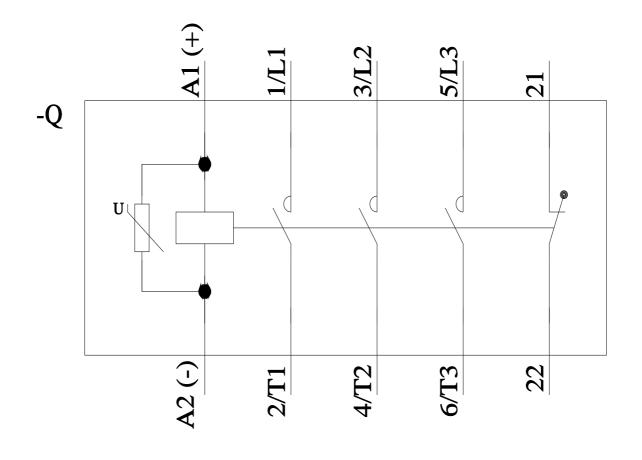
 $\label{eq:http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-4LB42&objecttype=14&gridview=view1&gridview1&gridview=view1&gridvie$











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