SIEMENS

Data sheet

3RT2017-1AH01



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 48 V AC, 50/60 Hz, auxiliary contacts: 1 NO, 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 	5.7 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	
 — 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	

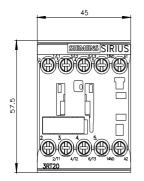
	— at 24 V rated value	20 A
• with 2 current path in sories at DC-3 at DC-6 20 A - at 20 V rated value 5A - at 10 V rated value 0.35 A - at 24 V rated value 20 A - at 240 V rated value 55 KW - at 240 V rated value 55 KW - at 240 V rated value 55 KW - at 250 V rated value 25 KW op 0.00 V for curret pack value n=20 rated value		
		0.15 A
	-	
	— 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 26 V rated value 55 kW - at 26 V rated value 25 kW - at 26 V rated value 28 kVA - op 16 20 V rated value 28 kVA - op 16 20 V fract value n=20 rated value 28 kVA - op 16 20 V for current pack value n=20 rated value 28 kVA - op 16 20 V for curre	— 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 it AC-3 - at 230 V rated value - at 230 V rated value - at 230 V rated value - 5 KW - at 300 V rated value - 5 KW - at 300 V rated value - at 300 V rated value - at 300 V rated value - at 230 V rated value - at 400 V rated value - at 600 V for current pack value n=20 rated value - up to 230 V for current pack value n=20 rated value - up to 400 V for current pack value n=20 rated value - up to 400 V for current pack value n=20 rated value - up to 400 V for current pack value n=20 rated value - up to 400 V for current pack value n=20 rated value - up to 400 V for current pack value n=20 rated value - up to 400 V for current pack value n=20 rated value - up to 400 V for current pack value n=30 rated value - up to 400 V for current pack value n=30 rated value - 3 KVA - up to 500 V for current pack value n=30 rated value - 3 KVA - up to 400 V for current pack value n=30 rated value - 3 KVA - 4 Use minimum cross-section acc. to AC-1 rated value - 4 KO - 4 KO - 5 KWA - 5 KWA	— at 440 V rated value	0.2 A
• at 2G-3 - at 230 V rated value 3 kW - at 300 V rated value 5 kW - at 300 V rated value 5 kW - at 200 V rated value 5 kW - at 400 V rated value 5 kW - at 400 V rated value 5 kW - at 200 V rated value 5 kW - at 200 V rated value 2 kW - at 600 V fraide value 2 kW - at 600 V fraide value 2 kW - at 600 V fraide value 2 kWA - up to 200 V for current pack value n=20 rated value 8 kVA - up to 200 V for current pack value n=20 rated value 8 kVA operating apparent power 4 AC-8a 1.9 kVA - up to 200 V for current pack value n=30 rated value 3.8 VA - up to 200 V for current pack value n=30 rated value 3.8 VA - up to 200 V for current pack value n=30 rated value 1.9 kVA - up to 500 V for current pack value n=30 rated value 1.8 kVA - up	— at 600 V rated value	0.2 A
	operating power	
	• at AC-3	
	— at 230 V rated value	3 kW
	— at 400 V rated value	5.5 kW
e at AC-3e - at 230 V reted value 3 kW - at 230 V reted value 5 kW - at 690 V reted value 2 kW - at 690 V for current peak value n=20 reted value 4 kVA - up to 500 V for current peak value n=20 reted value - kVA - up to 600 V for current peak value n=20 reted value - kVA - up to 600 V for current peak value n=20 reted value - wip to 600 V for current peak value n=30 reted value - wip to 600 V for current peak value n=30 reted value - kVA - up to 600 V for current peak value n=30 reted value - KVA - wip to 600 V for current peak value n=30 reted value - KVA - wip to 600 V for current peak value n=30 reted value - KVA - wip to 500 V for current peak value n=30 reted value - KVA - wip to 500 V for current maximum - with co 5 is witching at zero current maximum - witch o 1 is switching at zero current maximum - witch o 1 is switching at zero current maximum - witch 0 - 0 is switching at zero current maximum	— at 500 V rated value	5.5 kW
e at AC-3e - at 230 V reted value 3 kW - at 230 V reted value 5 kW - at 690 V reted value 2 kW - at 690 V for current peak value n=20 reted value 4 kVA - up to 500 V for current peak value n=20 reted value - kVA - up to 600 V for current peak value n=20 reted value - kVA - up to 600 V for current peak value n=20 reted value - wip to 600 V for current peak value n=30 reted value - wip to 600 V for current peak value n=30 reted value - kVA - up to 600 V for current peak value n=30 reted value - KVA - wip to 600 V for current peak value n=30 reted value - KVA - wip to 600 V for current peak value n=30 reted value - KVA - wip to 500 V for current peak value n=30 reted value - KVA - wip to 500 V for current maximum - with co 5 is witching at zero current maximum - witch o 1 is switching at zero current maximum - witch o 1 is switching at zero current maximum - witch 0 - 0 is switching at zero current maximum	— at 690 V rated value	5.5 kW
		3 kW
		5.5 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-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=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 3.3 kVA • up to 500 V for current peak value n=30 rated value 5.7 kVA Short-time withtsand current in cold operating state up to 50° 60° kV for current meakimum • limited to 10 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 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- 10 000 1/h • at AC-3 maximum 750 1/h • at AC-4 maximum 750 1/h		
A dot V rated value at 690 V for current peak value n=20 rated value at 690 V for current peak value n=20 rated value by to 500 V for current peak value n=20 rated value by to 500 V for current peak value n=20 rated value by to 500 V for current peak value n=20 rated value by to 500 V for current peak value n=20 rated value by to 400 V for current peak value n=30 rated value by to 400 V for current peak value n=30 rated value by to 400 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value by to 500 V for current peak value n=30 rated value for Use minimum cross-section acc. to AC-1 rated value inited to 10 s switching at zero current maximum for Use switching fact peo current maximum for Use switching fact peo current maximum for Use minimum cross-section acc. to AC-1 rated value intAC- for for farent value if AC- for 0000 1/h operati		
• 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 6.2 kVA • up to 500 V for current peak value n=20 rated value 8 kVA operating apparent power at AC-6a 6.2 kVA • up to 500 V for current peak value n=30 rated value 8 kVA operating apparent power at AC-6a 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 5.7 kVA short-time withstand current neak 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 • limited to 1s 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 1000 1/h • at AC 10 000 1/h 1000 1/h </td <td></td> <td></td>		
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 8.2 kVA • up to 690 V for current peak value n=20 rated value 8.4VA • up to 500 V for current peak value n=20 rated value 8.4VA • 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 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 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 1.9 kVA • limited to 1 s switching at zero current maximum 120 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 60 s switching at zero current maximum 61 A; Use minimum cross-section acc. to AC-1 rated value • at AC-1 maximum 1000 1/h • at AC-3 maximum 10000 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum <t< td=""><td>• at 400 V rated value</td><td>2 kW</td></t<>	• at 400 V rated value	2 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 6.2 kVA • up to 500 V for current peak value n=30 rated value 8.4VA • 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 1.1 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 °CC 6.7 kVA short-time withstand current maximum 200 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 20A ; Use minimum cross-section acc. to AC-1 rated value • limited to 53 s switching at zero current maximum 96 A; Use minimum cross-section acc. to AC-1 rated value • limited to 50 s switching at zero current maximum 74 ; Use minimum cross-section acc. to AC-1 rated value • at AC 10 000 1/h • eat AC 10 000 1/h • occurrent maximum 1 000 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum	• at 690 V rated value	2.5 kW
 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-6 up to 230 V for current peak value n=30 rated value 1.9 kVA 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 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 limited to 1 s switching at zero current maximum limited to 1 s switching at zero current maximum short-time to 5 s switching at zero current maximum limited to 50 s switching at zero current maximum switching at zero current maximum de 3.0 switching at zero current maximum de 4.0 Use minimum cross-section acc. to AC-1 rated value de 3.0 switching at zero current maximum for 1/h de 3.0 switching at zero current maximum foreting frequency et 3.0 cortical supply	operating apparent power at AC-6a	
• 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 19 kVA • up to 400 V for current peak value n=30 rated value 19 kVA • up to 500 V for current peak value n=30 rated value 4.1 kVA • up to 630 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 50 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 80 s switching at zero current maximum • limited to 80 s switching at zero current maximum • limited to 80 s switching at zero current maximum • limited to 80 s switching at zero current maximum • limited to 80 s switching at zero current maximum • at AC 10 000 1/h operating frequency • at AC • at AC-4 maximum 1000 1/h • at AC-3 maximum 1000 1/h • at AC-3 maximum 250 1/h • at AC-4 maximum 250 1/h • at AC-4 maximum 250 1/h • at AC-4 maximum 550 1/h • at AC-4 maximum 550 1/h • at AC-4 maximum 48 V • at 60 Hz rated value 48 V • at 60 Hz rated value 48 V • at 60 Hz rated value 48 V	 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 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 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 1 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 • 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 10 000 1/h • at AC 10 000 1/h 250 1/h • at AC-3 maximum <td> up to 400 V for current peak value n=20 rated value </td> <td>4.9 kVA</td>	 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 590 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 0 • 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 30 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 61 A; Use minimum cross-section acc. to AC-1 rated value • at AC 10 000 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-4 maximum 250 1/h Control circuit/ Control 48 V <td> up to 500 V for current peak value n=20 rated value </td> <td>6.2 kVA</td>	 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 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 200 A; Use minimum cross-section acc. to AC-1 rated value limited to 10 s switching at zero current maximum for 4.7 Use minimum cross-section acc. to AC-1 rated value limited to 30 s switching at zero current maximum for 4.7 Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum for 4.7 Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum for 4.7 Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum for 4.7 Use minimum cross-section acc. to AC-1 rated value at AC-1 maximum at AC-1 maximum at AC-1 maximum ta AC-2 maximum ta AC-3 maximum ta AC-4 maximum <lita ac-4="" li="" maximum<=""> ta AC-4 maximum ta AC-</lita>	 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 5 s switching at zero current maximum 203 A; Use minimum cross-section acc. to AC-1 rated value • limited to 5 a 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 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 000 1/h • at AC-1 maximum 1000 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 Uter tert value type of voltage of the contr	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 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 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 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/hoperating frequency• at AC• at AC10 000 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• at AC-4 maximum250 1/h• at AC 4 maximum48 V• at 50 Hz rated value48 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 °C5.7 kVA• 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 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• at AC10 000 1/hoperating frequency•• at AC-1 maximum1000 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 maximum48 V• at 50 Hz rated value48 V• at 60 Hz rated value48 V• at	 up to 400 V for current peak value n=30 rated value 	3.3 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 °C5.7 kVA• 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 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• at AC10 000 1/hoperating frequency•• at AC-1 maximum1000 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 maximum48 V• at 50 Hz rated value48 V• at 60 Hz rated value48 V• at	• up to 500 V for current peak value n=30 rated value	4.1 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 96 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 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 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 • at 50 Hz rated value 48 V • at 50 Hz rated value 48 V • at 60 Hz rated value 48 V		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 5 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 4 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 4 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 4 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 4 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 4 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 4 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 100 000 1/h at AC-1 maximum 1000 1/h at AC-2 maximum 1000 1/h at AC-3 maximum 100 1/h at AC-3 maximum 250 1/h control supply voltage at AC at 60 Hz rated value AC at 60 Hz rated value AV at 60 Hz rated value 48 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 AC10 000 1/hoperating frequency1 000 1/h• at AC-1 maximum1 000 1/h• at AC-3 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 maximum48 V• at 50 Hz rated value48 V• at 60 Hz rated value48 V• at 60 Hz rated value48 V	40 °C	
 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 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 48 V at 60 Hz rated value 48 V operating range factor control supply voltage rated value of magnet coil 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 62 01 1/h 63 AC-2 maximum 63 0 1/h 60 Hz 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 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
• 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 48 V • at 60 Hz rated value 48 V • at 60 Hz rated value 48 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 frequency10 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-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximumACControl circuit/ Control	 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-3 maximum250 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 value48 V• at 60 Hz rated value48 V• at 60 Hz rated value48 V	 limited to 60 s switching at zero current maximum 	61 A; Use minimum cross-section acc. to AC-1 rated value
operating 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-3e maximum750 1/h• at AC-3e maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximumAC• at AC-4 maximum48 V• at 50 Hz rated value48 V• at 60 Hz rated value48 V• at 60 Hz rated value48 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 maximum250 1/hControl circuit/ ControlAC• at 50 Hz rated value48 V• at 60 Hz rated value48 V• at 60 Hz rated value48 V	• at AC	10 000 1/h
• at AC-2 maximum750 1/h• at AC-3 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/hControl circuit/ ControlACcontrol supply voltage at ACAC• at 50 Hz rated value48 V• at 60 Hz rated value48 V• at 60 Hz rated value48 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/ ControlAC• otat ge of the control supply voltageAC• at 50 Hz rated value48 V• at 60 Hz rated value48 V• operating range factor control supply voltage rated value of magnet coil at AC	• at AC-1 maximum	1 000 1/h
• at AC-3e maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ ControlACtype of voltage of the control supply voltageACcontrol supply voltage at AC48 V• at 50 Hz rated value48 V• at 60 Hz rated value48 Voperating range factor control supply voltage rated value of magnet coil at ACImagnet coil at AC	• at AC-2 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 50 Hz rated value 48 V • at 60 Hz rated value 48 V operating range factor control supply voltage rated value of magnet coil at AC	• at AC-3 maximum	750 1/h
Control circuit/ Control AC type of voltage of the control supply voltage AC control supply voltage at AC 48 V • at 50 Hz rated value 48 V • at 60 Hz rated value 48 V operating range factor control supply voltage rated value of magnet coil at AC 48 V	• at AC-3e maximum	750 1/h
type of voltage of the control supply voltage AC control supply voltage at AC 48 V • at 50 Hz rated value 48 V • at 60 Hz rated value 48 V operating range factor control supply voltage rated value of magnet coil at AC 48 V	• at AC-4 maximum	250 1/h
control supply voltage at AC 48 V • at 50 Hz rated value 48 V • at 60 Hz rated value 48 V operating range factor control supply voltage rated value of magnet coil at AC 48 V	Control circuit/ Control	
control supply voltage at AC 48 V • at 50 Hz rated value 48 V • at 60 Hz rated value 48 V operating range factor control supply voltage rated value of magnet coil at AC 48 V		AC
at 50 Hz rated value at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC		
• at 60 Hz rated value 48 V operating range factor control supply voltage rated value of magnet coil at AC		48 V
operating range factor control supply voltage rated value of magnet coil at AC		
magnet coil at AC		
• at 50 Hz 0.8 1.1		
	• at 50 Hz	0.8 1.1

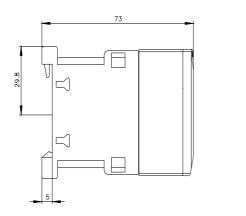
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	37 VA
• at 60 Hz	33 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.8
● at 60 Hz	0.75
apparent holding power of magnet coil at AC	
• at 50 Hz	5.7 VA
● at 60 Hz	4.4 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
● 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 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 	1 A
 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 110 V rated value	1 A
• 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	

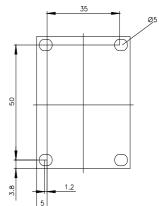
• for short-circuit protection of the main circuit	
 — with type of coordination 1 required 	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
 — with type of assignment 2 required 	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
 for short-circuit protection of the 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
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 	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
• 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	
	Yes; with 3RH29
mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920	1 000 000
B10 value with high demand rate according to SN 31920	
 proportion of dangerous failures with low demand rate according to SN 31920 	40 %
 with how demand rate according to SN 31920 with high demand rate according to SN 31920 	40 % 73 %
• with high demand rate according to SN 31920	15 /0

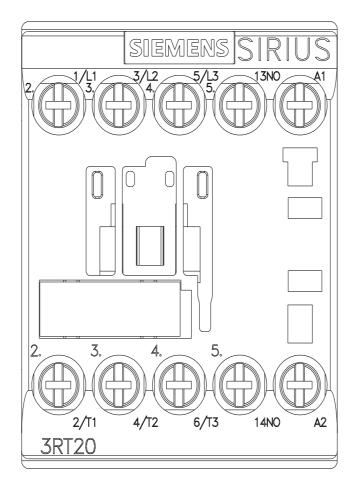
failure rate [FIT] with lo	w demand rate according	to SN 31920	100 FIT		
T1 value for proof test 61508	interval or service life acco	rding to IEC	20 a		
protection class IP or	n the front according to II	EC 60529	IP20		
touch protection on t	he front according to IEC	60529	finger-safe, for vertical conta	act from the front	
suitability for use					
 safety-related sv 	witching OFF		Yes		
Certificates/ approvals					
General Product App	oroval				
(SP)	<u>Confirmation</u>			KC	EAC
EMC	Functional Safety/Safety of Ma- chinery	Declaration of	Conformity	Test Certificates	
RCM	<u>Type Examination Cer-</u> <u>tificate</u>	UK CA	CE EG-Konf.	Special Test Certific- ate	Type Test Certific- ates/Test Report
Marine / Shipping					
ABS	B U REAU VERITAS		Lloyds Kegister us	PRS	RINA
Marine / Shipping	other			Railway	Environment
RMRS RMRS	<u>Confirmation</u>	UDE VDE	<u>Confirmation</u>	<u>Vibration and Shock</u>	Environmental Con- firmations

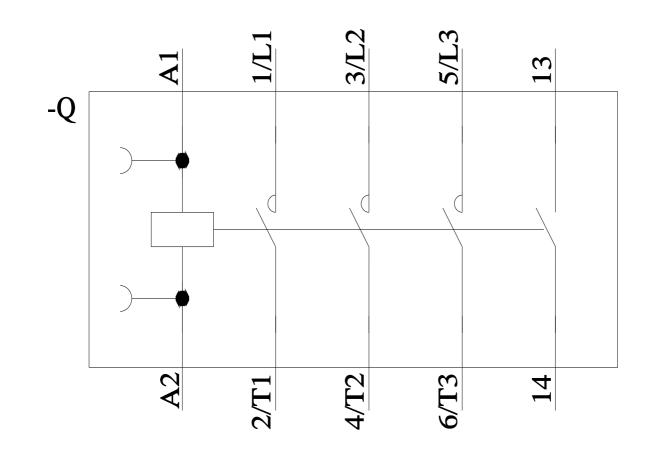
	emens has decided to exit the Russian market (see here). tps://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
ΡI	emens is working on the renewal of the current EAC certificates. ease contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to a AC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
	formation on the packaging tps://support.industry.siemens.com/cs/ww/en/view/109813875
In	tos://www.siemens.com/ic10
	dustry Mall (Online ordering system) tps://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2017-1AH01
	ax online generator tp://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1AH01
	ervice&Support (Manuals, Certificates, Characteristics, FAQs,) tps://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AH01
	nage database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) tp://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1AH01⟨=en
	haracteristic: Tripping characteristics, I²t, Let-through current tps://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AH01/char
	tp://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1AH01&objecttype=14&gridview=view1











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