SIEMENS

Data sheet 3RT2028-4BB40



power contactor, AC-3e/AC-3, 38 A, 18.5 kW / 400 V, 3-pole, 24 V DC, auxiliary contacts: 1 NO + 1 NC, ring cable lug connection, size: S0 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
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 	9.6 W
 at AC in hot operating state per pole 	3.2 W
 without load current share typical 	5.9 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	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 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	

	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 	50 A
value	
• at AC-1	
 up to 690 V at ambient temperature 40 °C rated value 	50 A
— up to 690 V at ambient temperature 60 °C rated	42 A
value	
• at AC-3	
— at 400 V rated value	38 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-3e	
— at 400 V rated value	38 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-4 at 400 V rated value	22 A
• at AC-5a up to 690 V rated value	44 A
at AC-5b up to 400 V rated value	31.5 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	30.8 A
— up to 400 V for current peak value n=20 rated value	30.8 A
— up to 500 V for current peak value n=20 rated value	30.8 A
— up to 690 V for current peak value n=20 rated value	21 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	20.5 A
— up to 400 V for current peak value n=30 rated value	20.5 A
— up to 500 V for current peak value n=30 rated value	21.4 A
— up to 690 V for current peak value n=30 rated value	21 A
minimum cross-section in main circuit at maximum AC-1 rated	10 mm²
	10 111111-
value	10 1111117
	10 min
value operational current for approx. 200000 operating cycles at	12 A
value operational current for approx. 200000 operating cycles at AC-4	
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value	12 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value	12 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current	12 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1	12 A 12 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value	12 A 12 A 35 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value	12 A 12 A 35 A 20 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value	12 A 12 A 35 A 20 A 4.5 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value • with 2 current paths in series at DC-1	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 110 V rated value — at 110 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A 35 A 35 A 35 A
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 440 V rated value — at 600 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A 35 A 35 A 35 A 35 A 36 A 37 A 38 A 38 A 39 A 30 A
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 24 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 4500 V rated value — at 600 V rated value	12 A 12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A 35 A 35 A 35 A 35 A 36 A 37 A 38 A 38 A 39 A 30 A 30 A 31 A 32 A 33 A 34 A 35 A 36 A 37 A 38
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 600 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 600 V rated value — at 440 V rated value — at 600 V rated value — at 220 V rated value — at 240 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A 35 A 35 A 35 A 36 A 37 A 38
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 10 V rated value — at 10 V rated value — at 220 V rated value — at 220 V rated value — at 220 V rated value — at 24 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value	12 A 12 A 35 A 20 A 4.5 A 1 A 0.4 A 0.25 A 35 A 35 A 35 A 36 A 37 A 38
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 1220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 60 V rated value — at 60 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 110 V rated value — at 110 V rated value — at 110 V rated value	12 A 12 A 12 A 20 A 4.5 A 1 A 0.4 A 0.25 A 35 A 3
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 20 V rated value — at 24 V rated value — at 24 V rated value — at 600 V rated value — at 24 V rated value — at 20 V rated value	12 A 12 A 12 A 12 A 20 A 4.5 A 1 A 0.4 A 0.25 A 35 A 35 A 35 A 35 A 35 A 5 A 1 A 0.8 A
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 1220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 60 V rated value — at 60 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 110 V rated value — at 110 V rated value — at 110 V rated value	12 A 12 A 12 A 20 A 4.5 A 1 A 0.4 A 0.25 A 35 A 35 A 35 A 35 A 35 A 35 A 35 A

— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
at AC-2 at 400 V rated value	18.5 kW
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
• at AC-3e	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
operating power for approx. 200000 operating cycles at AC-	10.0 KW
4	
 at 400 V rated value 	6 kW
• at 690 V rated value	10.3 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	12.2 kVA
• up to 400 V for current peak value n=20 rated value	21.3 kVA
• up to 500 V for current peak value n=20 rated value	26.6 kVA
 up to 690 V for current peak value n=20 rated value 	25 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	8.1 kVA
 up to 400 V for current peak value n=30 rated value 	14.2 kVA
 up to 500 V for current peak value n=30 rated value 	18.5 kVA
• up to 690 V for current peak value n=30 rated value	25 kVA
short-time withstand current in cold operating state up to	
40 °C	
 limited to 1 s switching at zero current maximum 	593 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	341 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	260 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	199 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	162 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at DC	1 500 1/h
operating frequency	
• 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-4 maximum	250 1/h

type of voltage of the control supply voltage Control supply voltage at DC * Initial value operating range factor control supply voltage rated value of major col at 0.7 * Initial value operating range factor ontrol supply voltage rated value of major col at 0.7 * Initial value observed of major col at DC * Initial value observed of major col at DC observed of major col at DC operating delay * at DC operating delay * at DC arcing time ocortrol version of the switch operating mechanism Standard A1 - A2 Auxillary circuit number of NC contacts for auxillary contacts instantaneous contact contact contact ocortrol version of the switch operating mechanism standard A1 - A2 Auxillary circuit number of NC contacts for auxillary contacts instantaneous contact contact contact ocortrol version of the switch operating mechanism poperational current at AC-12 maxillary contacts instantaneous contact ocortrol version of the switch operating mechanism poperational current at AC-12 maxillary contacts instantaneous ocortrol version of the switch operating mechanism poperational current at AC-12 maxillary contacts instantaneous 1 number of NC contacts for auxillary contacts instantaneous 1 number of NC contacts for auxillary contacts instantaneous 1 number of NC contacts for auxillary contacts 1 number of NC contacts for auxillary contacts 1 number of NC contacts for auxillary contacts 1 number of NC contacts are for auxillary contacts 1 number of NC contacts are for auxillary contacts 1 number of NC contact at DC-12 * at 22 V rated value * at 16 V rated val	Control circuit/ Control	
Control supply voltage at IC File		DC
* rated value 24 V		
operational current at AC-15 • all 400 V rated value • at 600 V rat		24 V
• full scale value 1.1		
Closing power of magnet coil at DC	• initial value	0.8
Deciding power of magnet coil at DC S 9 W	• full-scale value	1.1
Closing delay	closing power of magnet coil at DC	5.9 W
	holding power of magnet coil at DC	5.9 W
opening delay at TC at T	closing delay	
acting time	• at DC	50 170 ms
Arching time	opening delay	
Control version of the switch operating mechanism Standard A1 - A2	• at DC	15 18 ms
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous 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 2 A at 500 V rated value 1 A operational current at DC-12 at 24 V rated value 1 A operational current at DC-12 at 24 V rated value 6 A at 600 V rated value 6 A at 600 V rated value 1 A operational current at DC-12 at 24 V rated value 6 A at 60 V rated value 1 A 0 A 0 A 0 A 0 A 0 A 0 A 0 A 0 A 0 A 0	arcing time	10 10 ms
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous operational current at AC-12 maximum 10 A operational current at AC-15 • at 200 Y rated value • at 400 V rated value • at 200 V rated value • at 200 V rated value • at 200 V rated value • at 400	control version of the switch operating mechanism	Standard A1 - A2
Contact	Auxiliary circuit	
Donational current at AC-12 maximum 10 A		1
Departational current at AC-15	•	1
• at 230 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 60 V rated value • at 80 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 110 V rated value • at 120 V rated value • at 10 hp • for single-phase AC motor • at 200 V rated value • at 200 V rated v	operational current at AC-12 maximum	10 A
* at 400 V rated value 2 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 6 A * at 60 V rated value 6 A * at 60 V rated value 6 A * at 60 V rated value 6 A * at 110 V rated value 3 A * at 125 V rated value 1 A * at 220 V rated value 1 A * at 600 V rated value 1 A * at 600 V rated value 2 A * at 600 V rated value 1 A * at 600 V rated value 2 A * at 600 V rated value 2 A * at 24 V rated value 2 A * at 24 V rated value 2 A * at 600 V rated value 1 A * at 125 V rated value 1 A * at 125 V rated value 1 A * at 125 V rated value 1 A * at 126 V rated value 1 A * at 127 V rated value 1 A * at 128 V rated value 1 A * at 128 V rated value 1 A * at 129 V rated value 1 A * at 120 V rated val	operational current at AC-15	
* at 500 V rated value	at 230 V rated value	10 A
• at 690 V rated value		
Operational current at DC-12		
• at 24 V rated value • at 48 V rated value • at 60 V rated value • at 61 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • 5 hp • for 3-phase AC motor • at 400/480 V rated value • 600 V rated value • 700 P600 Short-circuit protection design of the fuse link		1 A
	•	
at 60 V rated value		
• at 220 V rated value		
• 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 2A • at 60 V rated value 1A • at 125 V rated value 0.3 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 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value 5 hp • for 3-phase AC motor — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 250/230 V rated value 25 hp — at 460/480 V rated value 25 hp — at 450/480 V rated value 25 hp — at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link		
operational current at DC-13		
• at 24 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 800 V rated value • at 800 V rated value • at 800 V rated value • at 480 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • for single-phase AC motor • at 110/120 V rated value • at 110/120 V rated value • for 3-phase AC motor • at 200/208 V rated value • for 3-phase AC motor • at 200/208 V rated value • for 3-phase AC motor • at 200/208 V rated value • for 3-phase AC motor • at 200/208 V rated value • 5 hp • contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link		0.15 A
 at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 48 V rated value at 480 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 7 A vielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value bp at 200/208 V rated value at 2575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link 	•	10 A
 at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 7 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value at 7 A About 7 A Ab		
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 800 V rated value full-load current (FLA) for 3-phase AC motor at 800 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value for single-phase AC motor at 230 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 25 hp at 460/480 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link 		
at 125 V rated value at 220 V rated value 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 34 A at 600 V rated value 27 A yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value 5 hp for 3-phase AC motor - at 230 V rated value 5 hp at 220/230 V rated value 10 hp - at 220/230 V rated value 25 hp - at 460/480 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link		
at 220 V rated value at 600 V rated value 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 at 600 V rated value at 600 V rated value bfor single-phase AC motor at 110/120 V rated value at 23 V rated value bfor 3-phase AC motor at 230 V rated value bfor 3-phase AC motor at 200/208 V rated value bfor 3-phase AC motor at 2		
ottact reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor otta 480 V rated value otta 600 V rated value otta 600 V rated value of or single-phase AC motor ottat 110/120 V rated value ottated va		
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 • at 600 V rated value 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link		a.a.y ontoning por 100 million (11 v, 1 milly
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at 600 V rated value yielded mechanical performance [hp] of for single-phase AC motor - at 110/120 V rated value - at 230 V rated value of for 3-phase AC motor - at 200/208 V rated value 10 hp - at 220/230 V rated value 10 hp - at 460/480 V rated value 25 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	. , .	34 A
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link		
for single-phase AC motor — at 110/120 V rated value		
- at 110/120 V rated value 3 hp - at 230 V rated value 5 hp ● for 3-phase AC motor - at 200/208 V rated value 10 hp - at 220/230 V rated value 10 hp - at 460/480 V rated value 25 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the fuse link		
- at 230 V rated value 5 hp • for 3-phase AC motor - at 200/208 V rated value 10 hp - at 220/230 V rated value 10 hp - at 460/480 V rated value 25 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the fuse link	- 1	3 hp
- at 220/230 V rated value 10 hp - at 460/480 V rated value 25 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the fuse link	• for 3-phase AC motor	
- at 460/480 V rated value 25 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the fuse link	— at 200/208 V rated value	10 hp
- at 460/480 V rated value 25 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the fuse link		
contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link	— at 460/480 V rated value	
Short-circuit protection design of the fuse link	— at 575/600 V rated value	25 hp
design of the fuse link	contact rating of auxiliary contacts according to UL	A600 / P600
	Short-circuit protection	
for short-circuit protection of the main circuit	design of the fuse link	
	• for short-circuit protection of the main circuit	

— with type of coordination 1 required

— with type of assignment 2 required

for short-circuit protection of the auxiliary switch required

gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)

gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA)

aG: 10 A (500 V. 1 kA)

 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	85 mm	
width	45 mm	
depth	107 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	Ring cable lug connection	
 for auxiliary and control circuit 	ring terminal lug connection	
 at contactor for auxiliary contacts 	Ring cable lug connection	
of magnet coil	Ring cable lug connection	
Safety related data		
product function		
 mirror contact according to IEC 60947-4-1 	Yes	
suitability for use safety-related switching OFF	Yes	
B10 value with high demand rate according to SN 31920	450 000	
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 low demand rate according to SN 31920	100 FIT	
T1 value for proof test interval or service life according to IEC 61508	20 a	
protection class IP on the front according to IEC 60529	IP00	

Certificates/ approvals General Product Approval



Confirmation





<u>KC</u>



Functional

EMC Safety/Safety of Machinery Declaration of Conformity Test Certificates



Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Railway

Dangerous Good

Environment



Confirmation



Vibration and Shock

Transport Information

Environmental Confirmations

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=3RT2028-4BB40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2028-4BB40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2028-4BB40

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

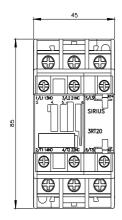
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2028-4BB40&lang=er

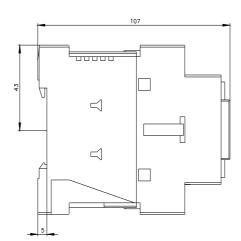
Characteristic: Tripping characteristics, I2t, Let-through current

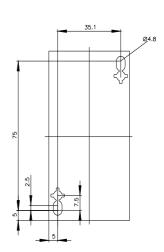
https://support.industry.siemens.com/cs/ww/en/ps/3RT2028-4BB40/char

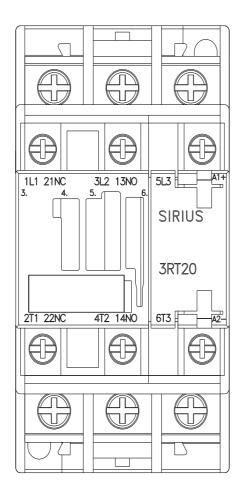
Further characteristics (e.g. electrical endurance, switching frequency)

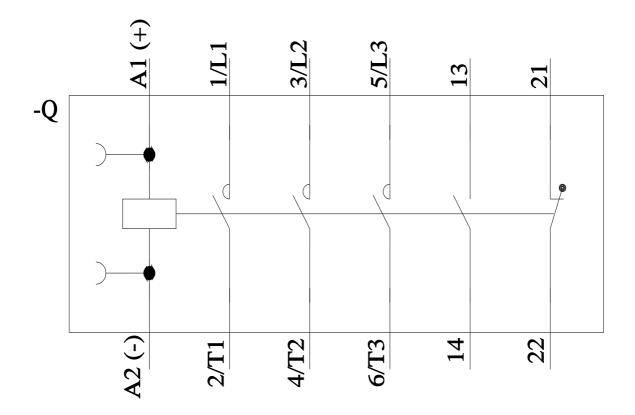
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2028-4BB40&objecttype=14&gridview=view1











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