SIEMENS

Data sheet

3RT2028-1BB40



Power contactor, AC-3 38 A, 18.5 kW / 400 V 1 NO + 1 NC, 24 V DC 3-pole, size S0 screw terminals

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	11.4 W		
per pole	3.8 W		
power loss [W] for rated value of the current without load current share typical	5.9 W		
surge voltage resistance			
 of main circuit rated value 	6 kV		
 of auxiliary circuit rated value 	6 kV		
maximum permissible voltage for safe isolation between coil and main contacts acc. 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 (switching 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 acc. to IEC 81346-2	Q		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
 ambient temperature during operation 	-25 +60 °C		
ambient temperature during storage	-55 +80 °C		
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		
operational current			



• at AC-1 at 400 V at ambient temperature 40 °C 50 A • rated value 50 A • up to 500 V at ambient temperature 60 °C 50 A • at AC-3 50 A • at AC-3 at 400 V rated value 32 A • at AC-3 at 400 V rated value 32 A • at AC-4 at 400 V rated value 32 A • at AC-5 au to 500 V rated value 32 A • at AC-5 au to 500 V rated value 32 A • at AC-5 au to 500 V rated value 32 A • at AC-5 au to 500 V rated value 33 A • at AC-6 au 400 V rated value 30.8 A • at AC-6 au to 500 V for current peak value m-20 rated 30.8 A • at AC-6 at 400 V for current peak value m-20 rated 30.8 A • at AC-6 at 400 V for current peak value m-20 rated 30.8 A • at AC-6 at 400 V for current peak value m-20 rated 30.8 A • at AC-6 at 400 V for current peak value m-30 rated 20.5 A • at AC-6 at 400 V for current peak value m-30 rated 20.5 A • at AC-6 at 400 V for current peak value m-30 rated 21 A • at AC 7 at 400 V for current peak value m-30 rated 21 A • at AO V for do value 20 S A<		
		50 A
racid value	• at AC-1	
raid value in a diametric • eit AC-3 38 A - eit 600 V raide value 38 A - eit 600 V raide value 21 A • eit AC-3 to 00 V raide value 22 A • eit AC-5 to 00 b 0400 V reted value 31.5 A • eit AC-5 to 00 b 0400 V reted value 31.5 A • eit AC-5 to 00 b 0400 V reted value 30.8 A - up to 230 V for current peak value n=20 reted 30.8 A - up to 500 V for current peak value n=20 reted 21.4 value - up to 500 V for current peak value n=30 reted 20.5 A value - up to 500 V for current peak value n=30 reted 20.5 A value - up to 500 V for current peak value n=30 reted 21.4 A value - up to 500 V for current peak value n=30 reted 21.4 A value - up to 500 V for current peak value n=30 reted 21.4 A value - up to 500 V for current peak value n=30 reted 21.4 A value - up to 500 V for current peak value n=30 reted 21.4 A value - up to 500 V for current peak value n=30 reted 21.4 A value - up to 500 V for current peak value n=30 r		50 A
		42 A
	• at AC-3	
	— at 400 V rated value	38 A
• at AC-4 at 400 V rated value22 A• at AC-5s up to 500 V rated value44 A• at AC-5s up to 500 V rated value315 A• at AC-6s up to 500 V rated value30.8 A- up to 200 V for current peak value n=20 rated30.8 A- up to 500 V for current peak value n=20 rated30.8 A- up to 500 V for current peak value n=20 rated30.8 A- up to 500 V for current peak value n=20 rated30.8 A- up to 500 V for current peak value n=20 rated21 Avalue20.5 A- up to 200 V for current peak value n=30 rated20.5 Avalue20.5 A- up to 500 V for current peak value n=30 rated21.4 A- up to 500 V for current peak value n=30 rated21.4 A- up to 500 V for current peak value n=30 rated21.4 A- up to 600 V for current peak value n=30 rated21.4 A- up to 600 V for current peak value n=30 rated21.4 A- up to 500 V fracurent peak value n=30 rated21.4 A- up to 500 V rated value21.4 A- up to 600 V rated value12.A- up to 700 V rated value24.4 A- up to 700 V rated value25.A- at 42 V rated value35.A- at 410 V rated value35.A- at 410 V rated value35.A- at 420 V rated value35.A- at 410 V rated value35.A- at 420 V rated value35.A	— at 500 V rated value	32 A
• at AC-5a up to 690 V rated value 44 A • at AC-5b up to 400 V for current peak value n=20 rated value 30.8 A - up to 230 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 500 V for current peak value n=20 rated value 30.8 A - up to 500 V for current peak value n=20 rated value 21 A - up to 230 V for current peak value n=30 rated value 20.5 A - up to 500 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 500 V for current peak value n=30 rated value 21.4 A - up to 500 V for current peak value n=30 rated value 21.4 A - up to 500 V for current peak value n=30 rated value 21.4 A - up to 500 V for current peak value n=30 rated value 21.4 A - up to 500 V for current peak value n=30 rated value 21.4 A - up to 500 V for current peak value n=30 rated value 21.4 A - up to 500 V for current peak value n=30 rated value 21.4 A - up to 500 V for current peak value n=30 rated value 22.4 A - up to 500 V for current peak value n=30 rated value 24.4 A <t< td=""><td>— at 690 V rated value</td><td>21 A</td></t<>	— at 690 V rated value	21 A
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• at AC-6a - up to 230 V for current peak value n=20 rated 30.8 A - up to 400 V for current peak value n=20 rated 30.8 A - up to 500 V for current peak value n=20 rated 30.8 A - up to 500 V for current peak value n=20 rated 21 A - up to 500 V for current peak value n=30 rated 20.5 A - up to 400 V for current peak value n=30 rated 20.5 A - up to 500 V for current peak value n=30 rated 21.4 A - up to 500 V for current peak value n=30 rated 21.4 A - up to 500 V for current peak value n=30 rated 21.4 A value 21.4 A - up to 500 V for current peak value n=30 rated 21.4 A value 10 mm² - up to 680 V for current peak value n=30 rated 21.4 A value 22.5 A e at 600 V rated value 24.4 A - at 240 V rated value 25.A - at 240 V rated value 35.A	 at AC-5a up to 690 V rated value 	44 A
	 at AC-5b up to 400 V rated value 	31.5 A
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value 21 A - up to 690 V for current peak value n=20 rated value 21 A - 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 500 V for current peak value n=30 rated value 21.4 A - up to 600 V for current peak value n=30 rated value 21.4 A oute 21.4 A value 0 mm* - up to 600 V for current peak value n=30 rated value 21.4 A value 10 mm* operational current for approx. 200000 operating current for approx. 20000 operating current for approx. 20000 opera		30.8 A
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	value	21 A
valueAdd waterup to 400 V for current peak value n=30 rated value20.5 Åup to 500 V for current peak value n=30 rated value21.4 Å		
value 214 A	value	
value21 A— up to 690 V for current peak value n=30 rated value21 Aminimum cross-section in main circuit at maximum AC-1 rated value10 mm³operational current for approx. 20000 operating cycles at AC-412 A• at 400 V rated value12 A• at 600 V rated value12 A• at 10 urrent path at DC-1 at 24 V rated value35 A- at 110 V rated value0.4 A- at 440 V rated value0.4 A- at 440 V rated value35 A- at 410 V rated value0.4 A- at 600 V rated value0.4 A- at 22 V rated value35 A- at 110 V rated value0.4 A- at 22 V rated value35 A- at 24 V rated value0.4 A- at 600 V rated value0.4 A- at 22 V rated value35 A- at 24 V rated value35 A- at 440 V rated value35 A- at 440 V rated value<	value	
value Iomma minimum cross-section in main circuit at maximum AC-1 rated value 10 mm ^a operational current for approx. 200000 operating cycles at AC-4 12 A • at 400 V rated value 12 A • at 600 V rated value 12 A operational current 12 A • at 1 current path at DC-1 - - at 24 V rated value 35 A - at 110 V rated value 4.5 A - at 20 V rated value 0.4 A - at 400 V rated value 0.25 A - at 110 V rated value 35 A - at 410 V rated value 35 A - at 410 V rated value 0.4 A - at 400 V rated value 0.4 A - at 400 V rated value 0.5 A - at 410 V rated value 35 A - at 410 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 A - at 220 V rated value 35 A - at 440 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 A - a	value	
rated value Number Name operational current for approx. 200000 operating cycles at AC-4 I2 A • at 400 V rated value 12 A • at 690 V rated value 12 A operational current I2 A • at 1 current path at DC-1 - - at 24 V rated value 35 A - at 24 V rated value 4.5 A - at 220 V rated value 0.4 A - at 400 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 20 V rated value 35 A - at 400 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 20 V rated value 35 A - at 20 V rated value 35 A - at 20 V rated value 35 A - at 40 V rated value 35 A - at 20 V rated value 35 A - at 400 V rate	value	
cycles at AC-4 12 A • at 400 V rated value 12 A • at 690 V rated value 12 A operational current 12 A • at 1 current path at DC-1 - - at 24 V rated value 35 A - at 20 V rated value 0.4 A - at 440 V rated value 0.4 A - at 440 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 220 V rated value 35 A - at 440 V rated value 0.4 A - at 400 V rated value 0.4 A - at 400 V rated value 0.4 A - at 200 V rated value 0.5 A - at 210 V rated value 35 A - at 220 V rated value 35 A - at 240 V rated value 35 A - at 440 V rated value 5 A - at 440 V rated value 35 A - at 220 V rated value 35 A - at 440 V rated value 35 A	rated value	10 mm ²
• at 690 V rated value 12 A operational current - • at 1 current path at DC-1 - - at 24 V rated value 35 A - at 110 V rated value 45 A - at 220 V rated value 0.4 A - at 440 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 220 V rated value 35 A - at 110 V rated value 35 A - at 110 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 220 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 A - at 220 V rated value 35 A - at 440 V rated value 35 A - at 440 V rated value 0.8 A • with 3 current paths in series at DC-1 - - at 24 V rated value 35 A - at 24 V rated value 35 A - at 400 V rated value 35 A - at 24 V rated value 35 A - at 400 V rated value 35 A - at 400 V rated value	cycles at AC-4	
operational current• at 1 current path at DC-1 at 24 V rated value at 24 V rated value at 110 V rated value at 110 V rated value at 220 V rated value at 440 V rated value0.4 A at 600 V rated value0.25 A• with 2 current paths in series at DC-1 at 24 V rated value at 24 V rated value at 24 V rated value35 A at 220 V rated value at 24 V rated value35 A at 24 V rated value5 A at 440 V rated value5 A at 440 V rated value0.8 A• with 3 current paths in series at DC-1 at 24 V rated value at 24 V rated value0.8 A• with 3 current paths in series at DC-1 at 24 V rated value at 24 V rated value35 A at 440 V rated value35 A at 440 V rated value1.4 Aoperational current at 24 V rated value at 24 V rated value20 V rated value at 24 V rated value20 A at 24 V rated value20 A		
• at 1 current path at DC-1 5 - at 24 V rated value 35 A - at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1		12 A
- at 24 V rated value 35 A - at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 24 V rated value 35 A - at 24 V rated value 35 A - at 24 V rated value 35 A - at 24 V rated value 5 A - at 440 V rated value 1 A - at 240 V rated value 35 A - at 600 V rated value 35 A - at 440 V rated value 35 A - at 440 V rated value 35 A - at 440 V rated value 35 A - at 600 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 A - at 220 V rated value 35 A - at 440 V rated value 35 A - at 600 V rated value 20 A	-	
- at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 24 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 5 A - at 240 V rated value 5 A - at 240 V rated value 1 A - at 600 V rated value 0.8 A - at 110 V rated value 35 A - at 240 V rated value 35 A - at 440 V rated value 36 A - at 600 V rated value 0.8 A - at 110 V rated value 35 A - at 240 V rated value 35 A - at 110 V rated value 35 A - at 240 V rated value 35 A - at 220 V rated value 35 A - at 440 V rated value 20 A		05 A
- at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 24 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 5 A - at 240 V rated value 5 A - at 440 V rated value 0.8 A - at 600 V rated value 35 A - at 24 V rated value 35 A - at 24 V rated value 35 A - at 440 V rated value 0.8 A • with 3 current paths in series at DC-1 - - at 24 V rated value 35 A - at 20 V rated value 35 A - at 440 V rated value 35 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A operational current - - at 600 V rated value 2.9 A - at 600 V rated value 2.9 A - at 10 current path at DC-3 at DC-5 -		
- at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 24 V rated value 35 A - at 24 V rated value 35 A - at 110 V rated value 5 A - at 220 V rated value 5 A - at 440 V rated value 0.8 A - at 600 V rated value 35 A - at 600 V rated value 35 A - at 24 V rated value 35 A - at 20 V rated value 35 A - at 400 V rated value 2.9 A - at 600 V rated value 1.4 A operational current		
- at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 35 A - at 24 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 5 A - at 40 V rated value 1 A - at 600 V rated value 0.8 A - at 24 V rated value 35 A - at 20 V rated value 2.9 A - at 600 V rated value 1.4 A operational current 1.4 A - at 40 V rated value 2.9 A - at 600 V rated value 2.9 A - at 10 U rated value 2.9 A - at 40 V rated value 2.9 A - at 40 V rated value 2.9 A - at 40 V rated value 2.9 A - at 10 U rated value 2.9 A - at		
• with 2 current paths in series at DC-1 35 A - at 24 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 5 A - at 440 V rated value 1 A - at 600 V rated value 08 A - at 24 V rated value 35 A - at 220 V rated value 35 A - at 220 V rated value 35 A - at 220 V rated value 35 A - at 440 V rated value 35 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A operational current		
		0.23 A
- at 110 V rated value 35 A - at 220 V rated value 5 A - at 440 V rated value 1 A - at 600 V rated value 0.8 A • with 3 current paths in series at DC-1 - - at 24 V rated value 35 A - at 24 V rated value 35 A - at 110 V rated value 35 A - at 200 V rated value 35 A - at 200 V rated value 35 A - at 440 V rated value 35 A - at 440 V rated value 35 A - at 600 V rated value 35 A - at 600 V rated value 1.4 A operational current 1.4 A - at 1 current path at DC-3 at DC-5 - - at 24 V rated value 20 A		35 A
- at 220 V rated value5 A- at 440 V rated value1 A- at 600 V rated value0.8 A• with 3 current paths in series at DC-1 at 24 V rated value35 A- at 110 V rated value35 A- at 220 V rated value35 A- at 440 V rated value2.9 A- at 600 V rated value1.4 Aoperational current at 24 V rated value2.0 A		
- at 440 V rated value 1 A - at 600 V rated value 0.8 A • with 3 current paths in series at DC-1 - - at 24 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 A - at 220 V rated value 2.9 A - at 600 V rated value 1.4 A operational current 1.4 A - at 24 V rated value 2.9 A - at 600 V rated value 2.9 A - at 24 V rated value 2.9 A		
• with 3 current paths in series at DC-1 - at 24 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 A - at 220 V rated value 25 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A operational current - - at 24 V rated value 2.9 A - at 600 V rated value 2.9 A - at 600 V rated value 2.9 A		
- at 24 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A operational current		
- at 24 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A operational current	 with 3 current paths in series at DC-1 	
- at 220 V rated value 35 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A operational current		35 A
- at 440 V rated value 2.9 A - at 600 V rated value 1.4 A operational current - • at 1 current path at DC-3 at DC-5 - - at 24 V rated value 20 A	— at 110 V rated value	35 A
- at 600 V rated value 1.4 A operational current - • at 1 current path at DC-3 at DC-5 - - at 24 V rated value 20 A	— at 220 V rated value	35 A
operational current• at 1 current path at DC-3 at DC-5 at 24 V rated value20 A	— at 440 V rated value	2.9 A
at 1 current path at DC-3 at DC-5 — at 24 V rated value 20 A	— at 600 V rated value	1.4 A
- at 24 V rated value 20 A	operational current	
	 at 1 current path at DC-3 at DC-5 	
- at 110 V rated value 2.5 A		
	— at 110 V rated value	2.5 A

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— 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 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 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-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				
operating power for approx. 200000 operating cycles at AC-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 kV·A				
 up to 400 V for current peak value n=20 rated value 	21.3 kV·A				
 up to 500 V for current peak value n=20 rated value 	26.6 kV·A				
 up to 690 V for current peak value n=20 rated value 	25 kV·A				
operating apparent power at AC-6a					
 up to 230 V for current peak value n=30 rated value 	8.1 kV·A				
 up to 400 V for current peak value n=30 rated value 	14.2 kV·A				
 up to 500 V for current peak value n=30 rated value 	18.5 kV·A				
 up to 690 V for current peak value n=30 rated value 	25 kV·A				
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 	395 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 	186 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 60 s switching at zero current maximum 	152 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				
	750 1/h				
 at AC-3 maximum 					
 at AC-3 maximum at AC-4 maximum 	250 1/h				
	250 1/h				
• at AC-4 maximum	250 1/h DC				
at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC	DC				
at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value					
tat AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC 	DC 24 V				
at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value	DC 24 V 0.8				
tat AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value	DC 24 V 0.8 1.1				
tat AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value 	DC 24 V 0.8				

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closing delay	50 470			
• at DC	50 170 ms			
opening delay	45 47 5			
• at DC	15 17.5 ms			
arcing time	10 10 ms			
control version of the switch operating mechanism	Standard A1 - A2			
Auxiliary circuit				
number of NC contacts for auxiliary contacts instantaneous contact	1			
number of NO contacts for auxiliary contacts	1			
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	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 	34 A			
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	A600 / P600			
Short-circuit protection				
design of the fuse link				
 for short-circuit protection of the main circuit 				
— with type of coordination 1 required	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)			
— with type of assignment 2 required	gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (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 standard mounting 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	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	Sciew-type terminals			
for main contacts				
— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)			
— solid or stranded	2x (1 2.5 mm ²), 2x (2.5 10 mm ²)			
 — finely stranded with core end processing 	2x (1 2.5 mm ²), 2x (2.5 6 mm ²), 1x 10 mm ²			
at AWG cables for main contacts	2x (16 12), 2x (14 8)			
connectable conductor cross-section for main contacts				
• solid	1 10 mm²			
stranded	1 10 mm ²			
 finely stranded with core end processing 	1 10 mm ²			
connectable conductor cross-section for auxiliary				
contacts				
solid or stranded	0.5 2.5 mm ²			
finely stranded with core end processing	0.5 2.5 mm ²			
type of connectable conductor cross-sections				
for auxiliary contacts				
— solid or stranded	2x (0,5 1,5 mm ²), 2x (0,75 2,5 mm ²)			
— finely stranded with core end processing	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)			
 at AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)			
 AWG number as coded connectable conductor cross section for main contacts 	16 8			
 AWG number as coded connectable conductor cross section for auxiliary contacts 	20 14			
Safety related data				
B10 value with high demand rate acc. to SN 31920	1 000 000			
proportion of dangerous failures				
 with low demand rate acc. to SN 31920 	40 %			
 with high demand rate acc. to SN 31920 	73 %			
failure rate [FIT] with low demand rate acc. to SN 31920	100 FIT			

product function						
• mirror contact acc. to IEC 60947-4-1			Yes			
T1 value for proof test interval or service life acc. to IEC 61508		20 у				
protection class IP on	the front acc. to IE	C 60529	IP20			
touch protection on th	ne front acc. to IEC	60529	finger-safe, f	for vertical cont	act from the front	
suitability for use safety	-related switching O	FF	Yes			
Certificates/ approvals						
General Product App	roval					EMC
	CCC			<u>KC</u>	EHC	RCM
Declaration of Confo	rmity	Test Certificat	tes		Marine / Shipping	
<u>Miscellaneous</u>	CE EG-Konf.	<u>Type Test</u> <u>Certificates/Te</u> <u>Report</u>	St est <u>(</u>	<u>pecial Test</u> Certificate	ABS	B U REAU VERITAS
Marine / Shipping					other	
Hoyd's Register	RINA	KMRS RARS	ĺ	DNV-GL	<u>Confirmation</u>	UDE VDE
Further information						
Information- and Dow		ogs, Brochures,	.)			
https://www.siemens.co						
Industry Mall (Online https://mall.industry.sie		n/Catalog/product?	?mlfb=3RT202	<u>28-1BB40</u>		
o "						

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2028-1BB40

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

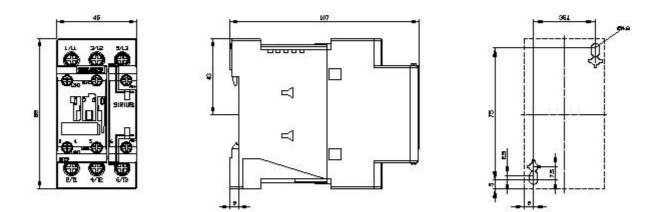
https://support.industry.siemens.com/cs/ww/en/ps/3RT2028-1BB40

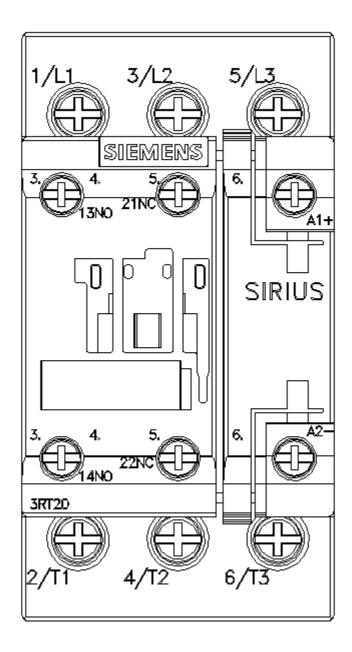
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2028-1BB40&lang=en

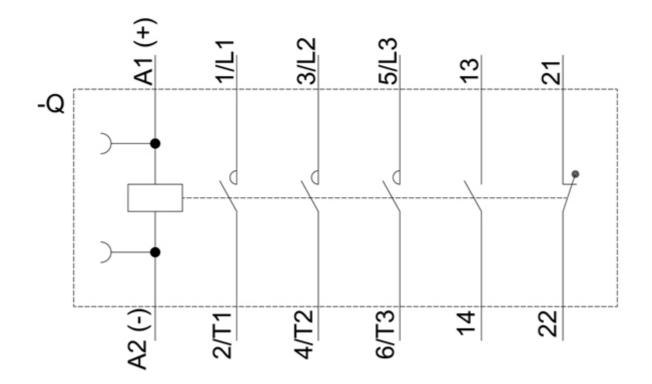
Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2028-1BB40/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2028-1BB40&objecttype=14&gridview=view1







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