SIEMENS

Data sheet

3RT2023-2BB40



power contactor, AC-3 9 A, 4 kW / 400 V 1 NO + 1 NC, 24 V DC 3-pole, Size S0 Spring-type terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	SO
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	0.6 W
• at AC in hot operating state per pole	0.2 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 safe isolation 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 (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 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 value 	40 A		
• at AC-1			
 — up to 690 V at ambient temperature 40 °C rated value 	40 A		
— up to 690 V at ambient temperature 60 °C rated value	35 A		
• at AC-3			
— at 400 V rated value	9 A		
— at 500 V rated value	9 A		
— at 690 V rated value	9 A		
• at AC-3e			
— at 400 V rated value	9 A		
— at 500 V rated value	9 A		
— at 690 V rated value	9 A		
• at AC-4 at 400 V rated value	8.5 A		
 at AC-5a up to 690 V rated value 	35.2 A		
• at AC-5b up to 400 V rated value	7.4 A		
• at AC-6a			
 up to 230 V for current peak value n=20 rated value 	11.4 A		
 up to 400 V for current peak value n=20 rated value 	11.4 A		
— up to 500 V for current peak value n=20 rated value	9.1 A		
 up to 690 V for current peak value n=20 rated value 	9 A		
 at AC-6a up to 230 V for current peak value n=30 rated value 	7.6 A		
 up to 400 V for current peak value n=30 rated value 	7.6 A		
 — up to 500 V for current peak value n=30 rated value 	6.1 A		
— up to 690 V for current peak value n=30 rated value	6.1 A		
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating	10 mm ²		
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	35 A		
— at 110 V rated value	4.5 A		
— at 220 V rated value	1A		
— 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 35 A		
	5 A		
— at 220 V rated value			
— at 440 V rated value	1A		
— 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 440 V rated value	2.9 A				
— at 600 V rated value	1.4 A				
 at 1 current path at DC-3 at DC-5 					
— at 24 V rated value	20 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 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	2.2 kW				
— at 400 V rated value	4 kW				
— at 500 V rated value	4 kW				
— at 690 V rated value	7.5 kW				
• at AC-3e					
— at 230 V rated value	2.2 kW				
— at 400 V rated value	4 kW				
— at 500 V rated value	4 kW				
— at 690 V rated value	7.5 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					
 up to 230 V for current peak value n=20 rated value 	4.5 kVA				
 up to 400 V for current peak value n=20 rated value 	7.8 kVA				
 up to 500 V for current peak value n=20 rated value 	7.8 kVA				
• up to 690 V for current peak value n=20 rated value	10.7 kVA				
operating apparent power at AC-6a					
 up to 230 V for current peak value n=30 rated value 	3 kVA				
 up to 400 V for current peak value n=30 rated value 	5.2 kVA				
 up to 500 V for current peak value n=30 rated value 	5.2 kVA				
• up to 690 V for current peak value n=30 rated value	7.2 kVA				
short-time withstand current in cold operating state up to 40 °C					
 limited to 1 s switching at zero current maximum 	170 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 5 s switching at zero current maximum 	170 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 10 s switching at zero current maximum 	122 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 30 s switching at zero current maximum 	78 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 60 s switching at zero current maximum 	68 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	1 000 1/h				
• at AC-3 maximum	1 000 1/h				

• at AC-4 maximum 300 1/h Centrol Circuit/ Control supply voltage DC • inited value 24 V operating range factor control supply voltage rated value of magnet coli at DC 5.8 • initial value 0.8 • control version of magnet coli at DC 5.9 W closing delay 0.10 ms • at DO 1010 ms control version of the switch operating mechanism Shandard At - A2 Auxiliary dracit 1 Instraineous contact 1 Instraineous contact 1 Instraineous contact 1 Instraineous contact 1 Instred value	• at AC-3e maximum	1 000 1/h
Control directif Control supply voltage at DC DC • rated value DC • initial value 0.8 • initial value 1 • interret int Contraits for auxiliary contacts 1 Initiatmetors contrait in the value 1 • at 200 value value 1A • operational current at AC-12 1 • at 200 value value 1A • at 200 value value 1A		
type of voltage of the centrel supply voltage DC control supply voltage at DC • raide value 24 V operating range factor control supply voltage rated value of magnet coll at DC 5.8 W - initial value 0.8 - initial value 1.1 closing power of magnet coll at DC 5.9 W closing delay 1.1 - at DC 50 170 ms - at DC 15 175 ms - at DC 15 175 ms - at DC 10 10 ms - at DC 10 A - operational current at AC-15 1 - at 300 V rated value 3.A - at 300 V rated value 3.A <td></td> <td></td>		
Anothol supply voltage at DC 24 V • rated value 24 V • oparating range factor control supply voltage rated value of magnet coll at DC 0.8 • full-scale value 1.1 • closing power of magnet coll at DC 5.9 W • holding power of magnet coll at DC 5.9 W • closing power of magnet coll at DC 5.9 W • closing delay 50 170 ms • at DC 15 17.5 ms • at DC 10 10 ms control version of the switch operating machanism Indicated A1 - A2 Availing circuit 10 10 ms number of N. Contacts for auxiliary contacts 1 instantaneous contact 10 operational current at AC-15 10 • at 230 V rated value 3.A • at 300 V rated value 3.A • at 430 V rated value 6.A • at 430 V rated value 1.A • at 440 V rated value 1.A • at 450 V rated value		DC
• rited value 24 V operating range factor control supply voltage rated visite of magnet coil at DC 0.8 • initial value 1.1 closing power of magnet coil at DC 5.9 W closing delay 5.9 W closing delay 5.9 W closing infactor control 5.9 W closing delay 5.9 W closing infactor control 5.9 W closing infactor control 5.9 W control version of the switch operating mechanism 5.9 W control version of the switch operating mechanism 5.9 W runder of NC contacts for auxiliary contacts 1 instantameous contact 1 operational current at AC-12 maximum 10.A operational current at AC-15 10.A • at 200 V rated value 1A • at 300 V rated value 1A • at 400 V rated value 6A • at 60 V rated value 1A • at 60 V rated value 1A • at 60 V rated value 1A • at 60 V rated value 6A • at 60 V rated value 1A •		
operating range factor control supply voltage rated visite of magnet coll at DC 0.8 • initial value 1.1 • folding power of magnet coll at DC 5.9 W • closing day 5.9 W • at DC 5.9 W • otholing power of magnet coll at DC 5.9 W • closing day 6.0 • at DC 5.9 W opening delay 10		24 V
value of magnet coil at DC 0.8 • Initial value 0.8 • Initial value 1.1 closing power of magnet coil at DC 5.9 W Indeling power of magnet coil at DC 5.9 W closing delay 5.9 W • at DC 50170 ms opening delay 5		24 V
• buil-scale value 11 closing power of magnet coil at DC 5.9 W holding power of magnet coil at DC 5.9 W closing delay 5.9 W • at DC 5.9 W opening delay 15 17.5 ms • arcing time 10 10 ms control version of the switch operating mechanism Standard A1 - A2 Multary circuit 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 1 instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at AC-12 1 • at 800 V rated value 2 A • at 800 V rated value 2 A • at 80 V rated value 10 A • at 24 V rated value 10 A • at 25 V rated value 2 A • at 10 V rated value 2 A • at 24 V rated value 2 A • at 25 V rated value 2 A • at 26 V rated value 1 A • at 22 V rated value 2 A • at		
closing power of magnet coil at DC 5.9 W holding power of magnet coil at DC 5.9 W closing delay 50 170 ms • at DC 15 17.5 ms arcing time 10 10 ms control version of the switch operating mechanism Standard A1 - A2 Availary clocut 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 10 A operational current at AC-15 10 A • at 200 v rated value 3 A • at 320 V rated value 10 A operational current at BC-12 10 A • at 400 V rated value 1 A operational current at BC-12 1 A • at 20 V rated value 1 A operational current at BC-12 1 A • at 20 V rated value 1 A operational current at BC-12 1 A • at 20 V rated value 1 A • at 20 V rated value 2 A • at 20 V rated value <	initial value	0.8
holding power of magnet coll at DC 5.9 W closing delay 50 170 ms opening delay 10 170 ms arcing time 10 10 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 10 10 ms number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at DC-12 1 et at 300 V rated value 2 A et at 600 V rated value 3 A et at 600 V rated value 6 A et at 20 V rated value 1 A operational current at DC-12 et at 20 V rated value et at 20 V rated value 6 A et at 20 V rated value 6 A et at 20 V rated value 2 A et at 20 V rated value 1 A et at 20 V rated value 2 A et at 60 V rated value	• full-scale value	1.1
e at DC 50 170 ms opening delay 15 17.5 ms a at DC 15 17.5 ms arcing time 10 10 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 10 A operational current at AC-15 1 • at 200 V rated value 3A • at 600 V rated value 3A • at 600 V rated value 1A operational current at AC-15 1 • at 200 V rated value 1A operational current at DC-12 1A • at 480 V rated value 10 A • at 480 V rated value 6A • at 480 V rated value 1A operational current at DC-13 1A • at 480 V rated value 1A • at 200 V rated value 1A	closing power of magnet coil at DC	5.9 W
• e1 DC 50 170 ms opening delay 15 17.5 ms arcing time 10 10 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at AC-15 1 • at 230 V rated value 1 A • at 230 V rated value 2 A • at 680 V rated value 6 A • at 690 V rated value 6 A • at 240 V rated value 1 A operational current at AC-12 • at 240 V rated value • at 690 V rated value 2 A • at 690 V rated value 6 A • at 24 V rated value 1 A operational current at DC-12 • at 24 V rated value • at 25 V rated value 1 A • at 26 OV rated value 2 A • at 20 V rated value 2 A • at 20 V rated value 1 A • at 20 V rated value 0 A • at 20 V rated value 0 A • at 60 V rated value 0 A • at 60 V rated value 2 A • at 60 V rated value 0 A • at 8 V rated value<	holding power of magnet coil at DC	5.9 W
opening delay 1517.5 ms arcing time 1010 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at AC-15 10 A e at 230 V rated value 2 A • at 400 V rated value 2 A • at 600 V rated value 1 A operational current at AC-12 maximum 10 A operational current at AC-12 maximum 10 A • at 400 V rated value 2 A • at 600 V rated value 2 A • at 600 V rated value 6 A • at 110 V rated value 2 A • at 22 V rated value 2 A • at 60 V rated value 2 A • at 22 V rated value 0 A • at 22 V rated value 0 A • at 22 V rated value <td>closing delay</td> <td></td>	closing delay	
• al DC 15 17.5 ms arcing time 10. ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at AC-12 maximum 10 A • at 230 V rated value 2 A • at 650 V rated value 6 A • at 650 V rated value 2 A • at 650 V rated value 6 A • at 650 V rated value 2 A • at 60 V rated value 6 A • at 24 V rated value 10 A • at 250 V rated value 2 A • at 60 V rated value 2 A • at 60 V rated value 2 A • at 220 V rated value 2 A • at 220 V rated value 10 A • at 60 V rated value 2 A • at 60 V rated value 2 A • at 8 V rated value 0.15 A operational current # DC-13 1 • at 60 V rated value 0.3 A • at 60 V rated value 0.3 A	• at DC	50 170 ms
arcing time 10 10 ms control version of the switch operating mechanism Standard A1 - A2 number of NC contacts for auxiliary contacts instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at AC-15 1 e at 200 V rated value 3 A e at 600 V rated value 3 A e at 600 V rated value 1 A operational current at AC-15 1 e at 200 V rated value 1 A operational current at AC-15 1 A operational current at DC-12 1 A e at 200 V rated value 6 A e at 200 V rated value 7 A e at 200 V rated value 0.4 A e at 200 V rated value 0.5 A e at 200 V rated value 0.5 A <tr< th=""><td>opening delay</td><td></td></tr<>	opening delay	
control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit Inumber of NC contacts for auxiliary contacts 1 instantaneous contact 1 Initiation consistent and the second and the	• at DC	15 17.5 ms
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 200 V rated value • at 600 V rated value • at 610 V rated value • at 620 V rated value • at 72 V rated value • at 620 V rated value • at 600 V rated value		10 10 ms
number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at AC-15 10 A • at 230 V rated value 3 A • at 600 V rated value 2 A • at 600 V rated value 10 A operational current at DC-12 10 A • at 600 V rated value 6 A • at 60 V rated value 6 A • at 10 V rated value 6 A • at 120 V rated value 10 A • at 220 V rated value 10 A • at 220 V rated value 10 A • at 220 V rated value 2 A • at 220 V rated value 1 A • at 220 V rated value 1 A • at 220 V rated value 0 A • at 220 V rated value 0 A • at 220 V rated value 0 A • at 220 V rated value 1 A • at 600 V rated value 2 A • at 600 V rated value 2 A • at 600 V rated value 2 A • at 60 V rated value 3 A • at 20 V rated value 3 A		Standard A1 - A2
instantaneous contact 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 10 A operational current at AC-12 maximum 10 A e at 230 V rated value 10 A • at 230 V rated value 3 A • at 600 V rated value 2 A • at 600 V rated value 1 A operational current at DC-12 1 A • at 24 V rated value 1 A • at 42 V rated value 6 A • at 10 V rated value 6 A • at 10 V rated value 1 A • at 10 V rated value 2 A • at 10 V rated value 1 A • at 20 V rated value 0 A • at 20 V rated value 0 A • at 48 V rated value 2 A • at 48 V rated value 2 A • at 60 V rated value 0 A • at 22 V rated value 0 A • at 25 V rated value 0 A • at 26 V rated value 0 A • at 20 V rated v	Auxiliary circuit	
number of NO contacts for auxiliary contacts 1 instantaneous contact 10 A operational current at AC-12 maximum 10 A operational current at AC-15 10 A • at 200 V rated value 3 A • at 500 V rated value 2 A • at 600 V rated value 1 A operational current at DC-12 10 A • at 60 V rated value 6 A • at 80 V rated value 6 A • at 80 V rated value 6 A • at 72 V rated value 6 A • at 80 V rated value 1 A operational current at DC-12 10 A • at 80 V rated value 6 A • at 10 V rated value 6 A • at 22 V rated value 1 A • at 22 V rated value 1 A • at 22 V rated value 2 A • at 22 V rated value 0.15 A operational current at DC-13 10 A • at 24 V rated value 2 A • at 24 V rated value 2 A • at 24 V rated value 0.15 A operational current at DC-13 10 A • at 24 V rated value 0.3 A • at 10 V rated value 0.4 A • at 10 V rated value 0.1 A contact reliability of auxiliary contacts 1 fau		1
Instantaneous contact 0 A operational current at AC-12 maximum 10 A • at 230 V rated value 10 A • at 230 V rated value 3 A • at 400 V rated value 2 A • at 600 V rated value 10 A • at 690 V rated value 10 A • at 690 V rated value 10 A • at 72 V rated value 10 A • at 84 V rated value 10 A • at 60 V rated value 6 A • at 60 V rated value 6 A • at 10 V rated value 10 A • at 60 V rated value 0 A • at 20 V rated value 10 A • at 20 V rated value 0.15 A operational current at DC-13 0 A • at 24 V rated value 10 A • at 44 V rated value 2 A • at 60 V rated value 0.5 A • at 24 V rated value 0.4 A • at 25 V rated value 0.3 A • at 25 V rated value 0.1 A • at 25 V rated value 0.1 A • at 26 V rated value 0.1 A • at 26 V rated value 0.1 A • at 200 V		1
operational current at AC-12 maximum 10 A operational current at AC-15 10 A • at 230 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 40 V rated value 6 A • at 40 V rated value 6 A • at 40 V rated value 6 A • at 60 V rated value 6 A • at 10 V rated value 6 A • at 220 V rated value 1 A • at 220 V rated value 1 A • at 220 V rated value 1 A • at 220 V rated value 10 A • at 220 V rated value 10 A • at 220 V rated value 10 A • at 220 V rated value 0.15 A operational current at DC-13 • • at 24 V rated value 10 A • at 25 V rated value 1 A • at 60 V rated value 1 A • at 60 V rated value 0.3 A • at 60 V rated value 0.1 A concarteroliability of auxiliary contacts 1 faulty swit	•	
operational current at AC-15 • at 230 V rated value • at 600 V rated value • at 600 V rated value • at 690 V rated value • at 74 V rated value • at 80 V rated value • at 10 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 20 V rated value • at 60 V rated value • at 20 V rated value • at 200 V rated value • at 200 V rated value <td></td> <td>10 A</td>		10 A
• at 400 V rated value 3 A • at 600 V rated value 2 A • at 600 V rated value 1 A operational current at DC-12 - • at 24 V rated value 10 A • at 60 V rated value 6 A • at 60 V rated value 6 A • at 60 V rated value 6 A • at 10 V rated value 3 A • at 22 V rated value 1 A • at 200 V rated value 2 A • at 200 V rated value 0.15 A operational current at DC-13 - • at 40 V rated value 2 A • at 60 V rated value 0.3 A • at 22 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UUCSA ratings - full-load current (FLA) for 3-phase AC motor - • at 80 V rated value 9 A yielded mechanical performance [hp]		
 at 500 V rated value at 690 V rated value 1A operational current at DC-12 at 24 V rated value 0 A at 48 V rated value 6 A at 60 V rated value 6 A at 10 V rated value 2 A at 125 V rated value 2 A at 220 V rated value 1 A at 220 V rated value 0.15 A operational current at DC-13 at 24 V rated value 0 A at 48 V rated value 0.15 A operational current at DC-13 at 24 V rated value 2 A at 60 V rated value 2 A at 10 V rated value 2 A at 24 V rated value 0 A at 48 V rated value 1 A at 10 V rated value 0 A at 48 V rated value 0 A at 20 V rated value 0 A at 48 V rated value 0 A at 48 V rated value 0 A at 48 V rated value 0 A at 600 V rated value 9 A yielded mechanical performance [hp] for single-phase AC motor - at 200 208 V rated value 1 hp - at 200 208 V rated value 2 hp - at 400480 V rated value 3 hp - at 400480 V rated value 5 hp - at 400400 V rated value 5 hp - at 400400 V rated value 5 hp - at 575/600 V rated value 7.5 hp 	 at 230 V rated value 	10 A
• at 680 V rated value 1 A operational current at DC-12 10 A • at 24 V rated value 6 A • at 48 V rated value 6 A • at 60 V rated value 6 A • at 10 V rated value 6 A • at 10 V rated value 3 A • at 220 V rated value 1 A • at 220 V rated value 0.15 A operational current at DC-13 • • at 24 V rated value 0.15 A operational current at DC-13 • • at 24 V rated value 0.15 A operational current at DC-13 • • at 60 V rated value 2 A • at 60 V rated value 2 A • at 60 V rated value 2 A • at 60 V rated value 0.9 A • at 220 V rated value 0.3 A • at 220 V rated value 0.1 A context reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UUCSA ratings full-load current (FLA) for 3-phase AC motor • at 80 V rated value 9 A yielded mechanical performance [hp] 9 A	 at 400 V rated value 	3 A
operational current at DC-12• at 24 V rated value10 A• at 48 V rated value6 A• at 60 V rated value6 A• at 10 V rated value3 A• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-13• at 42 V rated value10 A• at 600 V rated value10 A• at 42 V rated value10 A• at 43 V rated value2 A• at 60 V rated value1 A• at 60 V rated value2 A• at 10 V rated value0.9 A• at 10 V rated value0.9 A• at 220 V rated value0.1 A• at 60 V rated value0.1 A• at 600 V rated value0.1 A• at 600 V rated value0.1 A• at 600 V rated value7.6 A• at 600 V rated value9 A• yielded mechanical performance [hp]• for single-phase AC motor- at 200 V rated value1 hp- at 200 V rated value1 hp• at 200 V rated value2 hp- at 200208 V rated value2 hp- at 200208 V rated value3 hp- at 400480 V rated value5 hp- at 400480 V rated value5 hp- at 400480 V rated value5 hp- at 575/600 V rated value7.5 hp	 at 500 V rated value 	2 A
• at 24 V rated value10 A• at 48 V rated value6 A• at 60 V rated value6 A• at 110 V rated value3 A• at 125 V rated value2 A• at 220 V rated value0.15 Aoperational current at DC-130 A• at 24 V rated value10 A• at 48 V rated value10 A• at 48 V rated value0 A• at 48 V rated value2 A• at 24 V rated value10 A• at 48 V rated value2 A• at 24 V rated value2 A• at 24 V rated value2 A• at 60 V rated value2 A• at 10 V rated value1 A• at 220 V rated value0.3 A• at 220 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratings7.6 Afull-load current (FLA) for 3-phase AC motor-• at 480 V rated value9 Ayielded mechanical performance [hp]-• for single-phase AC motor at 230 V rated value1 hp- at 230 V rated value2 hp- at 220/230 V rated value3 hp- at 220/230 V rated value3 hp- at 220/230 V rated value5 hp- at 440/480 V rated value5 hp- at 450/480 V rated value5 hp- at 450/600 V rated value5 hp	 at 690 V rated value 	1 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 220 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 10 V rated value 0.9 A • at 250 V rated value 0.3 A • at 200 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings	operational current at DC-12	
e 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
e at 110 V rated value3 A• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-13	 at 48 V rated value 	6 A
• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-13• at 24 V rated value10 A• at 48 V rated value2 A• at 60 V rated value2 A• at 110 V rated value1 A• at 125 V rated value0.9 A• at 220 V rated value0.15 A• at 220 V rated value0.1 A• at 60 V rated value0.1 A• at 60 V rated value0.1 A• at 600 V rated value0.1 A• at 600 V rated value0.1 A• contact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 600 V rated value9 A• at 600 V rated value1 hp• at 300 V rated value1 hp• at 230 V rated value1 hp• at 200 V rated value1 hp• at 200/208 V rated value2 hp• at 200/208 V rated value3 hp• at 460/480 V rated value5 hp• at 457/600 V rated value7.5 hp	 at 60 V rated value 	6 A
• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-1310 A• at 24 V rated value10 A• at 48 V rated value2 A• at 48 V rated value2 A• at 600 V rated value1 A• at 110 V rated value0.9 A• at 220 V rated value0.3 A• at 600 V rated value0.1 A• at 480 V rated value9 A• at 480 V rated value1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratings	 at 110 V rated value 	3 A
• at 600 V rated value0.15 Åoperational current at DC-1310 Å• at 24 V rated value10 Å• at 48 V rated value2 Å• at 60 V rated value2 Å• at 10 V rated value1 Å• at 125 V rated value0.9 Å• at 220 V rated value0.3 Å• at 600 V rated value0.1 Å• at 600 V rated value0.4 Å• at 600 V rated value0.4 Å• at 600 V rated value0.4 Å• at 800 V rated value7.6 Å• at 480 V rated value9 Å• jelded mechanical performance [hp]9 Å• for single-phase AC motor1 hp- at 110/120 V rated value1 hp- at 200 / rated value1 hp- at 200 / rated value2 hp- at 200 / rated value3 hp- at 200 / rated value3 hp- at 460/480 V rated value5 hp- at 575/600 V rated value5 hp	• at 125 V rated value	2 A
operational current at DC-13• at 24 V rated value10 A• at 48 V rated value2 A• at 60 V rated value2 A• at 110 V rated value1 A• at 125 V rated value0.9 A• at 220 V rated value0.1 A• ontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 600 V rated value7.6 A• at 600 V rated value9 Ayielded mechanical performance [hp]• for single-phase AC motor- at 101/120 V rated value1 hp- at 230 V rated value1 hp• for single-phase AC motor- at 200/208 V rated value2 hp- at 200/208 V rated value3 hp- at 200/208 V rated value3 hp- at 480/480 V rated value3 hp- at 480/480 V rated value5 hp- at 57/600 V rated value5 hp	 at 220 V rated value 	1 A
• at 24 V rated value10 A• at 48 V rated value2 A• at 60 V rated value2 A• at 10 V rated value1 A• at 1125 V rated value0.9 A• at 220 V rated value0.3 A• at 220 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value9 A• at 600 V rated value9 Ayielded mechanical performance [hp]• for single-phase AC motor- at 110/120 V rated value1 hp- at 230 V rated value1 hp- at 230 V rated value1 hp- at 200/208 V rated value3 hp- at 200/208 V rated value3 hp- at 460/480 V rated value5 hp- at 575/600 V rated value5 hp	• at 600 V rated value	0.15 A
 at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value 9 A yielded mechanical performance [hp] for single-phase AC motor at 10/120 V rated value 1 hp at 230 V rated value 1 hp at 230 V rated value 4 hp at 200/208 V rated value 2 hp at 220/230 V rated value 3 hp at 460/480 V rated value 5 hp at 460/480 V rated value 7.5 hp 	operational current at DC-13	
• at 60 V rated value2 A• at 110 V rated value1 A• at 125 V rated value0.9 A• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value9 A• at 600 V rated value9 Ayielded mechanical performance [hp]• for single-phase AC motor- at 110/120 V rated value1 hp- at 230 V rated value1 hp- at 200/208 V rated value2 hp- at 220/230 V rated value3 hp- at 460/480 V rated value5 hp- at 460/480 V rated value5 hp	 at 24 V rated value 	10 A
 at 110 V rated value 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 7.6 A at 600 V rated value 9 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value 1 hp for 3-phase AC motor at 200/208 V rated value 1 hp at 200/208 V rated value 2 hp at 460/480 V rated value 5 hp at 600 V rated value 7.5 hp 	• at 48 V rated value	2 A
• at 125 V rated value0.9 A• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value7.6 A• at 600 V rated value9 Ayielded mechanical performance [hp]• for single-phase AC motor- at 110/120 V rated value1 hp- at 230 V rated value1 hp• for 3-phase AC motor- at 200/208 V rated value2 hp- at 200/208 V rated value3 hp- at 460/480 V rated value5 hp- at 4575/600 V rated value7.5 hp	• at 60 V rated value	2 A
• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value7.6 A• at 600 V rated value9 Ayielded mechanical performance [hp]• for single-phase AC motor- at 110/120 V rated value1 hp- at 230 V rated value1 hp• for 3-phase AC motor- at 200/208 V rated value2 hp- at 220/230 V rated value3 hp- at 460/480 V rated value5 hp- at 575/600 V rated value7.5 hp	• at 110 V rated value	1 A
• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor7.6 A• at 480 V rated value9 A• at 600 V rated value9 Ayielded mechanical performance [hp]1 hp• for single-phase AC motor1 hp- at 110/120 V rated value1 hp• for 3-phase AC motor2 hp- at 230 V rated value2 hp- at 200/208 V rated value3 hp- at 200/208 V rated value5 hp- at 460/480 V rated value5 hp- at 575/600 V rated value7.5 hp	• at 125 V rated value	0.9 A
contact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value7.6 A• at 600 V rated value9 Ayielded mechanical performance [hp]• for single-phase AC motor1 hp- at 110/120 V rated value1 hp- at 230 V rated value1 hp• for 3-phase AC motor2 hp- at 200/208 V rated value2 hp- at 220/230 V rated value3 hp- at 460/480 V rated value5 hp- at 575/600 V rated value7.5 hp	• at 220 V rated value	
UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value7.6 A• at 480 V rated value9 Ayielded mechanical performance [hp]• for single-phase AC motor- at 110/120 V rated value1 hp- at 230 V rated value1 hp- at 230 V rated value2 hp- at 200/208 V rated value3 hp- at 460/480 V rated value5 hp- at 575/600 V rated value7.5 hp		
full-load current (FLA) for 3-phase AC motor• at 480 V rated value7.6 A• at 600 V rated value9 Ayielded mechanical performance [hp]• for single-phase AC motor- at 110/120 V rated value1 hp- at 230 V rated value1 hp• for 3-phase AC motor- at 200/208 V rated value2 hp- at 220/230 V rated value3 hp- at 460/480 V rated value5 hp- at 575/600 V rated value7.5 hp		1 faulty switching per 100 million (17 V, 1 mA)
• at 480 V rated value7.6 A• at 600 V rated value9 Ayielded mechanical performance [hp]9 A• for single-phase AC motor- at 110/120 V rated value- at 110/120 V rated value1 hp- at 230 V rated value1 hp• for 3-phase AC motor- at 200/208 V rated value- at 200/208 V rated value2 hp- at 220/230 V rated value3 hp- at 460/480 V rated value5 hp- at 575/600 V rated value7.5 hp		
• at 600 V rated value 9 A yielded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value 1 hp - at 230 V rated value 1 hp • for 3-phase AC motor - at 200/208 V rated value 2 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 5 hp - at 575/600 V rated value 7.5 hp	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [hp]• for single-phase AC motor- at 110/120 V rated value1 hp- at 230 V rated value1 hp• for 3-phase AC motor1 hp• for 3-phase AC motor2 hp- at 200/208 V rated value3 hp- at 220/230 V rated value5 hp- at 460/480 V rated value7.5 hp		
 for single-phase AC motor at 110/120 V rated value thp at 230 V rated value thp for 3-phase AC motor at 200/208 V rated value thp at 220/230 V rated value thp at 460/480 V rated value thp thp at 575/600 V rated value thp		9 A
at 230 V rated value1 hp• for 3-phase AC motor2 hp at 200/208 V rated value2 hp at 220/230 V rated value3 hp at 460/480 V rated value5 hp at 575/600 V rated value7.5 hp		
 for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value bp at 460/480 V rated value 5 hp at 575/600 V rated value 7.5 hp 		
		1 hp
— at 460/480 V rated value 5 hp — at 575/600 V rated value 7.5 hp		
— at 575/600 V rated value 7.5 hp		
contact rating of auxiliary contacts according to UL A600 / P600	contact rating of auxiliary contacts according to UL	A600 / P600

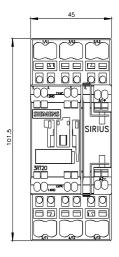
Short-circuit protection					
design of the fuse link					
 for short-circuit protection of the main circuit 					
— with type of coordination 1 required	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA				
— with type of assignment 2 required	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)				
 for short-circuit protection of the auxiliary switch 	gG: 10 A (500 V, 1 kA)				
required	go. 107(1000 v, 110)				
nstallation/ 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	102 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 	spring-loaded terminals				
 for auxiliary and control circuit 	spring-loaded terminals				
 at contactor for auxiliary contacts 	Spring-type terminals				
• of magnet coil	Spring-type terminals				
type of connectable conductor cross-sections					
 for main contacts 					
— solid	2x (1 10 mm²)				
— solid or stranded	2x (1 10 mm ²)				
 finely stranded with core end processing 	2x (1 6 mm²)				
— finely stranded without core end processing	2x (1 6 mm ²)				
at AWG cables for main contacts	2x (18 8)				
connectable conductor cross-section for main contacts					
• solid	1 10 mm²				
• stranded	1 10 mm²				
 finely stranded with core end processing 	1 6 mm²				
 finely stranded without core end processing 	1 6 mm²				
connectable conductor cross-section for auxiliary contacts					
 solid or stranded 	0.5 2.5 mm²				
 finely stranded with core end processing 	0.5 1.5 mm²				
 finely stranded without core end processing 	0.5 2.5 mm²				
type of connectable conductor cross-sections					
for auxiliary contacts					
— solid or stranded	2x (0.5 2.5 mm²)				
— finely stranded with core end processing	2x (0.5 1.5 mm ²)				
,					

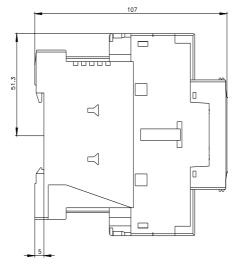
 at AWG cables 	for auxiliary contacts		2x (20 ²	14)			
	ded connectable cond	uctor cross					
section	to		10 0				
	 for main contacts for quviliant contacts 			18 8 20 14			
Safety related data	for auxiliary contacts						
product function		·	_	_			
	according to IEC 60947-	4-1	Yes				
	lemand rate according to		Yes 450 000				
proportion of dange			+50 000				
	nd rate according to SN	31920	40 %				
	nd rate according to SN		73 %				
	low demand rate accord		100 FIT				
T1 value for proof tes IEC 61508	t interval or service life	according to	20 y				
protection class IP of 60529	on the front according	to IEC	IP20				
touch protection on suitability for use	the front according to	IEC 60529	finger-safe	e, for vertical co	ontact from the front		
 safety-related s 	witching OFF		Yes				
Certificates/ approval							
General Product Ap							
General Floduct Ap	prova						
SP:	Confirmation	()		ա	KC	EAC	
CSA		ttt		UL			
EMC	Functional Safety/Safety of Machinery	Declaration o	of Conformi	ty	Test Certificates		
	<u>Type Examination</u> <u>Certificate</u>	UK CA		CE EG-Konf.	Special Test Certific- ate	Type Test Certific- ates/Test Report	
Marine / Shipping							
ABS	BUREAU VERITAS			Lloyds Register urs	PRS	RINA	
Marine / Shipping	other				Dangerous Good		
KMRS	Environmental Con- firmations	<u>Confirmatic</u>	<u>n</u>	UDE VDE	<u>Transport Informa-</u> tion		
https://www.siemens. Industry Mall (Online https://mall.industry.s	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=3RT2023-2BB40						
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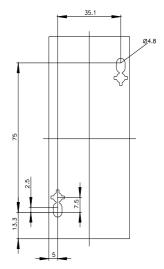
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-2BB40 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2023-2BB40&lang=en Characteristic: Tripping characteristics, I2t, Let-through current

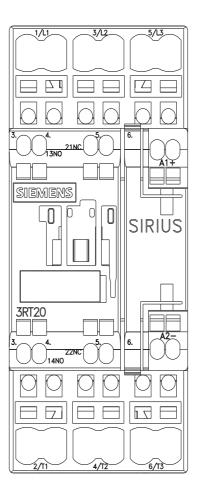
https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-2BB40/char

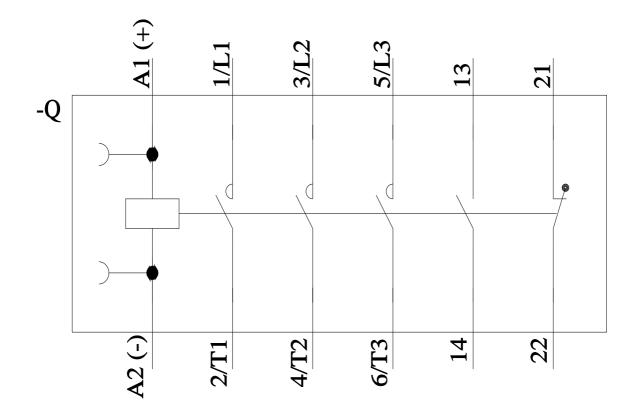
Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2023-2BB40&objecttype=14&gridview=view1











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