SIEMENS

Data sheet 3RT2027-1BB40



Power contactor, AC-3 32 A, 15 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 	6.3 W		
 at AC in hot operating state per pole 	2.3 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	50 A	
• at AC-1		
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	50 A	
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	42 A	
• at AC-3		
— at 400 V rated value	32 A	
— at 500 V rated value	32 A	
— at 690 V rated value	21 A	
• at AC-3e		
— at 400 V rated value	32 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	26.5 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 	27 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 	18 A	
— up to 690 V for current peak value n=30 rated value	18 A	
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating	10 mm²	
cycles at AC-4		
at 400 V rated value	12 A	
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	4.5 A	
— at 220 V rated value	1A	
— at 440 V rated value	0.4 A	
— at 440 V rated value — at 600 V rated value	0.25 A	
	0.20 A	
with 2 current paths in series at DC-1	05.4	
— 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	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	7.5 kW		
— at 400 V rated value	15 kW		
— at 500 V rated value	15 kW		
— at 690 V rated value	18.5 kW		
• at AC-3e			
— at 230 V rated value	7.5 kW		
— at 400 V rated value	15 kW		
— at 500 V rated value	15 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 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	23.3 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	15.5 kVA		
up to 690 V for current peak value n=30 rated value	21.5 kVA		
short-time withstand current in cold operating state			
up to 40 °C			
limited to 1 s switching at zero current maximum	499 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		
• at AC-3 maximum	750 1/h		

* at AC-4 maximum 250 %h Control circuit Centrol Supply voltage at DC year of voltage of the control supply voltage at DC year of voltage year of water of voltage at DC year of voltage year of water of w	at AC-3e maximum	750 1/h		
Section Circuit Control Sypo divatage of the control supply voltage DC Faled value				
Type of voltage of the control supply voltage DC		200 1111		
Control supply voltage at DC		DC		
- rated value 24 V				
Operational current at AC-12 maximum 10 A Operational current at AC-15 Operational current at AC-16 Operational current at AC-17 maximum Operational current at AC-18 Operational current at AC-19 Operat		24 V		
Value of magnet coll at DC Initial value		L1 V		
Closing power of magnet coil at DC	_	0.8		
Noticing power of magnet coil at DC So 170 ms	• full-scale value			
closing delay	closing power of magnet coil at DC	5.9 W		
e at DC opening delay	holding power of magnet coil at DC	5.9 W		
a ti DC	closing delay			
a al DC 15 17.5 ms arcing time 10 10 ms Auxiliary circuit number of NC contacts for auxiliary contacts at 230 V rated value 10 A		50 170 ms		
arcing time				
Control version of the switch operating mechanism Standard A1 - A2				
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts 1 number of NO contact for auxiliary contacts 1 number of NO contacts 1 number of NO contacts 1 number of NO contacts 1				
number of NC contacts for auxiliary contacts 1		Standard A1 - A2		
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 160 V rated value • at 110 V rated value • at 125 V rated value • at 126 V rated value • at 125 V rated value • at 125 V rated value • at 160 V rated value • at 160 V rated value • at 180 V rated value • at 185 V rated value • at 110 V rated value • at 110 V rated value • at 120 V rated value • at 180 V rated value • at 200 V rated value • at 480 V rated value • at 27 A yielded mechanical performance [hp] • for single-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • at 320 V rated valu				
number of NO contacts for auxiliary contacts instalnateous contact 1 10 10 10 10 10 10 10		1		
instantaneous contact operational current at AC-12 maximum operational current at AC-15 * at 230 V rated value * at 400 V rated value * at 6500 V ra		1		
Operational current at AC-15				
	operational current at AC-12 maximum	10 A		
	operational current at AC-15			
	• at 230 V rated value	10 A		
• at 690 V rated value 10 A operational current at DC-12 • at 24 V rated value 6 A • at 48 V rated value 6 A • at 60 V rated value 3 A • at 110 V rated value 11 A • at 220 V rated value 11 A • at 220 V rated value 11 A • at 48 V rated value 11 A • at 220 V rated value 11 A • at 220 V rated value 11 A • at 24 V rated value 11 A • at 48 V rated value 2 A • at 24 V rated value 2 A • at 25 V rated value 10 A • at 48 V rated value 2 A • at 110 V rated value 2 A • at 110 V rated value 11 A • at 125 V rated value 12 A • at 110 V rated value 13 A • at 220 V rated value 14 A • at 125 V rated value 15 A • at 200 V rated value 15 A • at 200 V rated value 16 A • at 48 V rated value 17 A • at 200 V rated value 17 A • at 200 V rated value 17 A • at 300 V rated value 27 A • at 600 V rated value 27 A yielded mechanical performance [hp] • for single-phase AC motor 27 A • at 200 V rated value 2 A • at 200 V rated value 2 A • at 200 V rated value 2 A • at 600 V rated value 3 A • at 600 V rated value 4 A • at 200 V rated value 5 A • at 200 V rated value 10 A • at 200 V rated value 20 A • at 200 V rated value 35 A • at 200 V rated value 35 A • at 200 V rated value 35 A • at 200 V rated value 30 A • at 200 V rated value 30 A • at 200 V rated value 30 A • at 200 V rated val	• at 400 V rated value			
Operational current at DC-12	• at 500 V rated value			
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 110 V rated value at 220 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 24 V rated value at 24 V rated value at 48 V rated value at 10 A at 22 V rated value at 10 A at 22 V rated value at 10 V rated value at 10 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 30 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 480 V rated value at 480 V rated value 27 A yielded mechanical performance [hp] of or single-phase AC motor — at 110/120 V rated value at 230 V rated value at 230 V rated value of 3-phase AC motor — at 230 V rated value of 3-phase AC motor — at 230 V rated value of 3-phase AC motor — at 200/208 V rated value of 3-phase AC motor — at 480/480 V rated value of 3-phase AC motor — at 480/480 V rated value of 3-phase AC motor — at 480/480 V rated value of 3-phase AC motor — at 480/480 V rated value of 3-phase AC motor — at 480/480 V rated value of 3-phase AC motor — at 480/480 V rated value of 3-phase AC motor — at 480/480 V rated value of 3-phase AC motor — at 480/480 V rated value of 3-phase AC motor		1 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 1 A at 600 V rated value at 600 V rated value 1 A at 600 V rated value 10 A at 48 V rated value at 48 V rated value 2 A at 60 V rated value 2 A at 10 V rated value 2 A at 110 V rated value 1 A at 120 V rated value 1 A at 120 V rated value 1 A at 120 V rated value 1 A at 100 V rated value 1 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) ULCSA 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 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 220/230 V rated value 10 hp at 460/480 V rated value 20 hp at 460/480 V rated value 20 hp at 575/600 V rated value 25 hp 	•			
 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 600 V rated value at 24 V rated value operational current at DC-13 at 24 V rated value at 80 V rated value at 60 V rated value at 60 V rated value at 60 V rated value at 10 A at 10 A at 24 V rated value at 10 A at 20 V rated value at 10 A at 10 V rated value at 10 A at 125 V rated value at 125 V rated value at 20 V rated value at 200 V rated value at 300 V rated value at 300 V rated value at 480 V rated value at 600 V rated value at 7 A at 100 V rated value at 27 A at 100 V rated value at 200 V rated value b for single-phase AC motor at 100 V rated value at 200 V rated value b fp at 200 V rated value b fp at 200 V rated value at 200 V rated value b fp at 460/480 V rated value at 460/480 V rated value at 460/480 V rated value at 5 fp at 575/600 V rated value 25 fp 				
 at 110 V rated value at 125 V rated value at 220 V rated value at 260 V rated value at 260 V rated value operational current at DC-13 at 24 V rated value at 20 V rated value at 110 V rated value at 125 V rated value at 20 V rated value at 20 V rated value at 300 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 7 A at 600 V rated value at 7 A at 100 V rated value at 27 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 120 V rated value b 10 hp at 200/208 V rated value at 460/480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 7 hp at 600 V rated value at 7 hp at 600 V rated value at				
 at 125 V rated value at 220 V rated value at 600 V rated value ontract value at 24 V rated value at 48 V rated value at 60 V rated value at 10 V rated value at 25 V rated value at 20 V rated value at 20 V rated value at 30 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 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 at 20 V rated value b 10 hp at 220/230 V rated value at 220/230 V rated value at 480/480 V rated value at 460/480 V rated value at 575/600 V rated value 25 hp 				
 at 220 V rated value at 600 V rated value 0.15 A operational current at DC-13 at 24 V rated value at 8 V rated value at 60 V rated value at 10 A at 48 V rated value at 10 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 30 V rated value at 600 V rated value at 7 A at 600 V rated value at 600 V rated value at 7 A yielded mechanical performance [hp] for single-phase AC motor at 10/120 V rated value bhp at 230 V rated value 5 hp for 3-phase AC motor at 200/208 V rated value bhp at 200/208 V rated value bhp at 480/480 V rated value 20 hp at 480/480 V rated value 20 hp at 575/600 V rated value 25 hp 				
■ at 600 V rated value Operational current at DC-13 ■ at 24 V rated value ■ at 48 V rated value ■ at 60 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 600 V rated value ■ at 600 V rated value ■ at 600 V rated value ■ at 800 V rated value ■ at 600 V rated value ■ at 600 V rated value ■ at 600 V rated value ■ at 80 V rated value ■ at 600 V rated value ■ at 70 V rated value ■ at 110/120 V rated value ■ at 220/230 V rated value ■ at 220/230 V rated value ■ at 220/230 V rated value ■ at 460/480 V rated value ■ at 460/480 V rated value ■ at 4575/600 V rated value ■ at 575/600 V rated value				
operational current at DC-13				
 at 24 V rated value 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 220 V rated value at 220 V rated value at 600 V rated value at 600 V rated value o.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 at 600 V rated value 27 A yielded mechanical performance [hp] for single-phase AC motor at 10/120 V rated value at 230 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 220/230 V rated value 10 hp at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value bp at 575/600 V rated value at 575/600 V rated value 		0.13 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 220 V rated value • at 220 V rated value • at 600 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 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 • at 200/208 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 575/600 V rated value • 25 hp	•	10 Δ		
 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 480 V rated value at 600 V rated value at 100/120 V rated value at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 460/480 V rated value at 460/480 V rated value at 575/600 V rated value bp at 575/600 V rated value at 57b/600 V rated value 				
• 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 contact 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 • 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 • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value 2 hp 10 hp - at 575/600 V rated value 2 0 hp - at 575/600 V rated value 2 5 hp				
 at 125 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 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 at 200 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 at 260/230 V rated value at 260/480 V rated value at 460/480 V rated value at 575/600 V rated value at 575/600 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 at 600 V rated value for single-phase AC motor at 110/120 V rated value at 20 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 at 200/230 V rated value bp at 460/480 V rated value at 460/480 V rated value at 575/600 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 at 600 V rated value 27 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value for 3-phase AC motor for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 460/480 V rated value at 575/600 V rated value 25 hp 				
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 — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value 25 hp				
Tull-load current (FLA) for 3-phase AC motor				
full-load current (FLA) for 3-phase AC motor ● at 480 V rated value 27 A ● 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 for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 25 hp 				
 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 for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value at 575/600 V rated value at 575/600 V rated value at 575/600 V rated value 				
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 2 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 20 hp — at 575/600 V rated value 25 hp		27 A		
 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 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value for 3 -phase AC motor hp at 220/238 V rated value bp 20 hp at 575/600 V rated value bp	• at 600 V rated value	27 A		
 — at 110/120 V rated value — at 230 V rated value 5 hp for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 25 hp 	yielded mechanical performance [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 20 hp — at 575/600 V rated value 25 hp	 for single-phase AC motor 			
● 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 20 hp — at 575/600 V rated value 25 hp	— at 110/120 V rated value	2 hp		
- at 200/208 V rated value 10 hp - at 220/230 V rated value 10 hp - at 460/480 V rated value 20 hp - at 575/600 V rated value 25 hp	— at 230 V rated value	5 hp		
— at 220/230 V rated value 10 hp — at 460/480 V rated value 20 hp — at 575/600 V rated value 25 hp	 for 3-phase AC motor 			
— at 460/480 V rated value 20 hp — at 575/600 V rated value 25 hp	 at 200/208 V rated value 	10 hp		
— at 575/600 V rated value 25 hp	 at 220/230 V rated value 			
	 at 460/480 V rated value 	20 hp		
contact rating of auxiliary contacts according to UL A600 / P600		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• for grounded parts	0 mm	
	40	
— forwards	10 mm	
— upwards	10 mm	
— at the side	6 mm	
— downwards	10 mm	
for live parts		
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	6 mm	
Connections/ Terminals		
type of electrical connection		
 for main current circuit 	screw-type terminals	
 for auxiliary and control circuit 	screw-type terminals	
 at contactor for auxiliary contacts 	Screw-type terminals	
of magnet coil	Screw-type terminals	
type of connectable conductor cross-sections		
for main contacts		
— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)	
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)	
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²	
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 mm²	
finely stranded with core end processing	1 10 mm²	
connectable conductor cross-section for auxiliary		
contacts		
 solid or stranded 	0.5 2.5 mm²	
 finely stranded with core end processing 	0.5 2.5 mm²	
type of connectable conductor cross-sections		
for auxiliary contacts		
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
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	
 for auxiliary contacts 	20 14	
Safety related data		
product function		
mirror contact according to IEC 60947-4-1	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 y	
protection class IP on the front according to IEC 60529	IP20	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front	
suitability for use		
 safety-related switching OFF 	Yes	
Certificates/ approvals		

General Product Approval



Confirmation





<u>KC</u>



EMC S	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
-------	---	---------------------------	-------------------



Type Examination Certificate



Type Test Certificates/Test Report

Special Test Certificate

Test Certificates Marine / Shipping

Miscellaneous











Marine / Shipping other **Dangerous Good**



Confirmation

Environmental Confirmations



Transport Informa-<u>tion</u>

Further information

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=3RT2027-1BB40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1BB40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1BB40

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-1BB40\&lang=enderse$

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1BB40/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-1BB40&objecttype=14&gridview=view1

6/2/2022 last modified: