SIEMENS

Data sheet 3RT2027-1BF44



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 110 V DC, auxiliary contacts: 2 NO + 2 NC, screw terminal, removable auxiliary switch

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	No
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 (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
 during storage 	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	

number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	000 \
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 °C rated value 	50 A
 up to 690 V at ambient temperature 60 °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 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	20.5 A
value — 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	10 mm²
operational current for approx. 200000 operating	
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 60 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 60 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 60 V rated value	35 A
and a second region of	

— at 110 V rated value	35 A
— at 220 V rated value	35 A 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	1.471
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
with 3 current paths in series at DC-3 at DC-5	2F A
— at 24 V rated value — at 60 V rated value	35 A
— at 60 V rated value — at 110 V rated value	35 A 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 	341 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum	260 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	199 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	162 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at DC	1 500 1/h
operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
at AC-3e maximum	750 1/h

Control circuit Gentrol Type of voltage of the control supply voltage ontrol supply voltage at DC * lated value * lated value orange factor control supply voltage rated value of magnet coil at DC * lated value orange factor control supply voltage rated value of magnet coil at DC * lated value orange factor control supply voltage rated value of magnet coil at DC * lated value * lated value orange factor control varsion of the switch operating mechanism Assulfary critical number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts restandances control number of NC contacts for auxiliary contacts 10 A 11 A 10 A 11 A 10 A 11 A 11 A 11 A 11 A 12 A 12 A 13 A 14 A 15 A 16 A 16 A 17 A 18	• at AC-4 maximum	250 1/h
type of voltage of the control supply voltage control supply voltage at DC entrol supply voltage at DC entrol supply voltage at DC entrol supply voltage rated value of magnet coil at DC entrol supply voltage rated value of magnet coil at DC entrol supply voltage rated value entrol various of magnet coil at DC entrol supply voltage rated value entrol various of the switch operating mechanism voltage voltag		
control supply voltage at DC		DC
operating range factor control supply voltage rated value of magnet coil at DC • Initial value		DC .
operating range factor control supply voltage rated value of magnet coil at DC initial value initial value initial value closing power of magnet coil at DC closing delay at DC opening delay at DC croing delay at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts standards A1 - A2 Auxiliary circuit number of NC contacts for auxiliary contacts reparational current at AC-12 at 220 V rated value at 650 V rated value at 460 V rated value at 460 V rated value at 410 V rated		110 V
value of magnet coll at DC • Initial value • Initial va		110 V
closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC	_	0.8
Action A	full-scale value	1.1
closing delay at DC opening delay at DC opening delay at DC arcing time control version of the switch operating mechanism Control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact coperational current at AC-12 maximum operational current at AC-12 maximum operational current at AC-13 maximum operational current at AC-14 maximum operational current at AC-15 maximum operational current at DC-12 at 280 V rated value at 560 V rated value be at 480 V rated value at 680 V rated value be at 480 V rated value at 125 V rated value at 126 V rated value at 127 V rated value at 128 V rated value at 180 V	closing power of magnet coil at DC	5.9 W
	holding power of magnet coil at DC	5.9 W
Page	closing delay	
achig time control version of the switch operating mechanism Ausiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-15 at 230 V rated value at 500 V rated value at 80 V rated value be at 40 V rated value at 80 V rated value be at 40 V rated value at 80 V rated value be at 80 V rated value be at 80 V rated value at 80 V rated value be	• at DC	50 170 ms
arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-12 maximum operational current at AC-15 et al. 20 v rated value at 400 v rated value be at 48 v rated value at 48 v rated value be at 48 v rated value be at 48 v rated value at 60 v ra	opening delay	
Control version of the switch operating mechanism Standard A1 - A2	• at DC	15 18 ms
Auxiliary circuit number of NC contacts for auxiliary contacts 2 1 1 1 1 1 1 1 1 1		
number of NC contacts for auxiliary contacts instantaneous contact		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 4500 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 125 V rated value • at 126 V rated value • at 127 V rated value • at 128 V rated value • at 110 V rated value • at 125 V rated value • at 126 V rated value • at 127 V rated value • at 128 V rated value • at 129 V rated value • at 120 V rated value • at 120 V rated value • at 120 V rated value • at 20 V rated value • at 30 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 500 V rated value • at 20 V rated value • at 600 V rated value • at 20 V rated value • at 600 V rated	· · · · · · · · · · · · · · · · · · ·	
number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum		2
instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value		2
operational current at AC-12 maximum operational current at AC-15		2
operational current at AC-15		10 A
e 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 operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 100 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 3 A • at 125 V rated value • at 600 V rated value • at 100 V rated value • at 100 V rated value • at 110 V rated value • at 120 V rated value • at 100 V rated value • at 100 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 100 V rated value • at 200 V rated value • at 600 V rated value • at 10/120 V rated value • at 10/120 V rated value • at 575/600 V rated value • at 376/600 V rated value • at 575/600 V rated value • at 675/600 V		6 A
• at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 80 V rated value • at 100 V rated value • at 110 V rated value • at 110 V rated value • at 120 V rated value • at 200 V rated value • at 800 V rated value • at 800 V rated value • at 800 V rated value • at 48 V rated value • at 110 V rated value • at 1220 V rated value • at 220 V rated value • at 800 V rated value • at 27 A **Julicas ratings** **Tull-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 800 V rated value • 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 • for 3-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 • for 3-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 • for 3-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 • for 3-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 • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC moto		3 A
operational current at DC-12 • at 24 V rated value • at 80 V rated value • at 80 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 3 t 600 V rated value • at 220 V rated value • at 600 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 300 V rated value • at 600 V rated value • at 7 A villoload current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 230 V rated value • at 230 V rated value • at 220 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 2200 V rated value • at 2200 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 2200 V rated value • for 3-phase AC motor • at 2200 V rated value • for 3-phase AC motor • at 2200 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 2200 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 575(500 V rated value • 25 hp • contact rating of auxiliary contacts according to UL 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	at 500 V rated value	2 A
	at 690 V rated value	1 A
• at 48 V rated value 6 A • at 60 V rated value 3 A • at 110 V rated value 2 A • at 220 V rated value 1 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 2 A • at 48 V rated value 2 A • at 600 V rated value 2 A • at 110 V rated value 2 A • at 110 V rated value 1 A • at 125 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 220 V rated value 2 A • at 800 V rated value 1 A • at 200 V rated value 2 A • at 600 V rated value 3 A • at 600 V rated value 4 A • at 600 V rated value 5 A • at 600 V rated value 5 A • at 600 V rated value 2 A • at 600 V rated value 3 A • at 600 V rated value 4 A • at 600 V rated value 5 A • at 600 V rated value 6 A • at 200/208 V rated value 10 A • at 200/208 V rated value 10 A • at 200/208 V rated value 10 A • at 200/208 V rated value 20 A • at 460/480 V rated value 600 V rated V rate	operational current at DC-12	
• at 60 V rated value	at 24 V rated value	10 A
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 600 V rated value at 48 V rated value at 48 V rated value at 110 V rated value at 48 V rated value at 160 V rated value at 110 V rated value at 20 V rated value at 200 V rated value at 600 V rated value at 80 V rated value at 80 V rated value at 80 V rated value at 600 V rated value at 27 A at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value at 600 V rated value 5 hp • 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 460/480 V rated value at 575/600 V rated value at 575/600 V rated value aut 375/600 V rated value aut 460/480 V rated value aut 460/480 V rated value aut 575/600 V rated value aut 600 V rated	 at 48 V rated value 	6 A
at 125 V rated value at 220 V rated value 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 46 V rated value at 60 V rated value at 60 V rated value at 10 V rated value at 10 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 7 A yielded mechanical performance [hp] • for single-phase AC motor — at 110 /120 V rated value 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 • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 575/600 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 600 V (600 V (6	 at 60 V rated value 	6 A
at 220 V rated value at 600 V rated value 0.15 A operational current at DC-13 at 24 V rated value 6 A at 48 V rated value 2 A at 110 V rated value 2 A at 110 V rated value 3 A at 220 V rated value 4 A t 125 V rated value 5 V rated value 6 A at 220 V rated value 7 A at 220 V rated value 9 A t 300 V rated value 9 A t 480 V rated value 9 A t 480 V rated value 9 A t 600 V rated value 9 A t 300 V rated value 9 A t 375/600 V rated	at 110 V rated value	3 A
• 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 100 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 • for single-phase AC motor - at 110/120 V rated value • for 3-phase AC motor - at 200/208 V rated value • for 3-phase AC motor - at 200/208 V rated value • at 460/480 V rated value - at 460/480 V rated value - at 575/600 V rated value - at 576/600 V rated value - at 576/600 V rated value - at 576/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required 9.125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A	 at 125 V rated value 	2 A
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 60 V rated value • at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 110/120 V rated value — at 230 V rated value — at 230 V rated value • 5 hp • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • 10 hp — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value contact rating of auxiliary contacts according to UL 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	 at 220 V rated value 	
at 24 V rated value at 6 A at 48 V rated value at 60 V rated value 2 A at 110 V rated value 3 1 A at 125 V rated value 3 2 A at 220 V rated value 3 3 A at 220 V rated value 3 3 A at 600 V rated value 4 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 5 A at 600 V rated value 7 A yielded mechanical performance [hp] of or single-phase AC motor — at 110/120 V rated value 5 hp of 3-phase AC motor — at 230 V rated value 5 hp of 3-phase AC motor — at 200/208 V rated value 5 hp of 3-phase AC motor — at 200/208 V rated value 5 hp of 3-phase AC motor — at 200/208 V rated value 7 A 20 hp - at 200/208 V rated value 9 to hp - at 460/480 V rated value 20 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link or for short-circuit protection of the main circuit — with type of coordination 1 required gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A		0.15 A
 at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 3 A 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 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 200/208 V rated value at 480/480 V rated value at 480/480 V rated value at 575/600 V rated value 20 hp at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A 	•	
 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 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 for single-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 by 6 at 200/208 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 at 600 / Q600 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 		
 at 110 V rated value at 125 V rated value at 220 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 for single-phase AC motor at 110/120 V rated value for single-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value of hp at 27 A at 27 A b for 3-phase AC motor at 27 A b for 3-phase AC motor at 27 A c for 3-phase AC motor at 27 A d for 3-phase AC motor at 27 A at 27 A b for 3-phase AC motor at 27 A b for 3-phase AC motor at 27 A c for 3-phase AC motor at 27 A b for 3-phase AC motor at 200/208 V rated value b for 3-phase AC motor at 200/208 V rated value b for 3-phase AC motor at 27 A b for 3-phase AC motor at 28 A (600 V, 100kA), all 50A (690 V, 100kA), BS88: 125A 		
at 125 V rated value at 220 V rated value at 220 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 at 600 V rated value bi for single-phase AC motor at 110/120 V rated value at 230 V rated value at 230 V rated value bi for 3-phase AC motor at 230 V rated value bi for 3-phase AC motor 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 460/480 V rated value bi for 3-phase AC motor at 460/480 V rated value bi for 3-phase AC motor at 250/230 V rated value bi for 3-phase AC motor at 27 A bi for 3-phase AC motor bi for 3-phase AC motor at 200/208 V rated value bi for 3-phase AC motor bi for 3-phase AC motor at 27 A bi for 3-phase AC motor bi for 3-phase AC motor at 25 hp bi for 3-phase AC motor bi for 3-phase AC motor at 200/208 V rated value bi for 3-phase AC motor bi for 3-p		
at 220 V rated value at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value befor single-phase AC motor - at 100/120 V rated value - at 230 V rated value - at 230 V rated value - 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 - at		
otated 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 otal 480 V rated value otal 600 V rated value otal 110/120 V rated value otal 110/120 V rated value otal 230 V rated value otal 200/208 V rated value otal 200/208 V rated value otal 460/480 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 • 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 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value Contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required I faulty switching per 100 million (17 V, 1 mA) 27 A 27 A 28 A 29 A 20 A 20 hp 30 hp 40 h		
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 • 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 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 25 hp contact rating of auxiliary contacts according to UL 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		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 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 — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 27 A 27 A 27 A 27 A 28 P 29 A 20 hp 20 hp 20 hp 20 hp 4600 / Q600 Short-circuit protection 4600 / Q600 Short-circuit protection 4600 / Q600 Short-circuit protection of the main circuit — with type of coordination 1 required 9G: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A		riauty Switching per 100 million (17 V, 1 mA)
 at 480 V rated value at 600 V rated value 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 220/230 V rated value - at 460/480 V rated value - at 460/480 V rated value - at 575/600 V rated value - with type of coordination 1 required gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A 		
 at 600 V rated value 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 20 hp contact rating of auxiliary contacts according to UL 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 		07.4
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 20 hp — at 460/480 V rated value 20 hp — at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link ● for short-circuit protection of the main circuit — with type of coordination 1 required gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A		
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- 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 20 hp — at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 5 hp 10 hp 20 hp 25 hp A600 / Q600		2 hn
 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 source trating of auxiliary contacts according to UL		
- at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value 20 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required 10 hp 10 hp 10 hp 12 hp 13 hp 14 hp 15 hp 16 hp 17 hp 18 hp 19 hp 19 hp 10 h		V 11/P
— at 220/230 V rated value — at 460/480 V rated value 20 hp — at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link ● for short-circuit protection of the main circuit — with type of coordination 1 required 10 hp 20 hp 25 hp A600 / Q600 Short-circuit protection gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A	•	10 hp
- at 460/480 V rated value - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required 20 hp 25 hp 26 hp 26 hp 27 hp 28 hp 29 hp 29 hp 20 hp 2		
— at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 25 hp A600 / Q600 Short-circuit protection gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A		
contact rating of auxiliary contacts according to UL 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		
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	contact rating of auxiliary contacts according to UL	
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		
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— with type of coordination 1 required gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A		
		gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A
	At any and	

- 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 gG: 10 A (500 V, 1 kA) required Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting Yes heiaht 85 mm width 45 mm depth 151 mm required spacing • with side-by-side mounting - forwards 10 mm 10 mm - upwards — downwards 10 mm - at the side 0 mm · for grounded parts 10 mm - forwards — upwards 10 mm 6 mm - at the side — 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 · of magnet coil Screw-type terminals

type of connectable conductor cross-sections for main contacts

solid

· solid or stranded • finely stranded with core end processing

connectable conductor cross-section for main contacts

solid stranded

finely stranded with core end processing

connectable conductor cross-section for auxiliary contacts

 solid or stranded · finely stranded with core end processing

type of connectable conductor cross-sections

• for auxiliary contacts - solid or stranded

- finely stranded with core end processing

• at AWG cables for auxiliary contacts

AWG number as coded connectable conductor cross section

· for main contacts • for auxiliary contacts Screw-type terminals

2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)

2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²

1 ... 10 mm²

0.5 ... 2.5 mm²

1 ... 10 mm² 1 ... 10 mm²

0.5 ... 2.5 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14)

16 ... 8 20 ... 14

Safety related data product function

• mirror contact according to IEC 60947-4-1

positively driven operation according to IEC 60947-

B10 value with high demand rate according to SN 31920 proportion of dangerous failures

Yes No

450 000

• with low demand rate according to SN 31920

• with high demand rate according to SN 31920

failure rate [FIT] with low demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 suitability for use

· safety-related switching OFF

40 % 73 %

100 FIT

20 a

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













other

Railway

Dangerous Good

Environment

Confirmation



Vibration and Shock

<u>Transport Information</u>

Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2027-1BF44

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1BF44

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

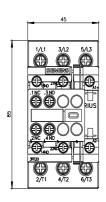
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1BF44

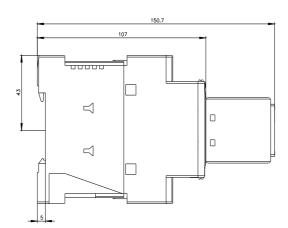
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

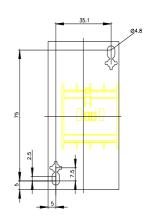
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-1BF44\&lang=en}}$

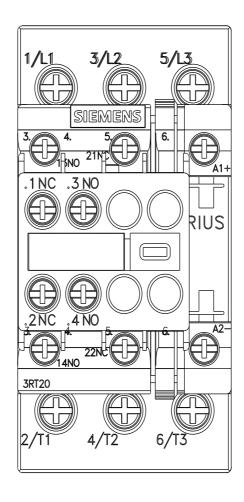
Characteristic: Tripping characteristics, I2t, Let-through current

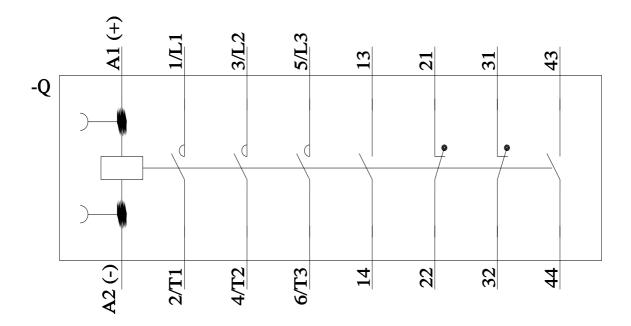
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1BF44/char











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