SIEMENS

Data sheet 3RT2027-2AB04



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 24 V AC, 50 Hz, auxiliary contacts: 2 NO + 2 NC, spring-loaded terminal, size: S0, 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 	9.8 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
 of main circuit rated value 	6 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 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	
• at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated 	50 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	50 A
value	40 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 at AC-5 cup to 600 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	10 mm ²
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 110 V rated value — 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.	25 A
— 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	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 60 V rated value	5 A
— at 220 V rated value	1A
— at 440 V rated value	0.09 A 0.06 A
— at 600 V rated value	0.00 A
with 2 current paths in series at DC-3 at DC-5 at 24 V reted value.	25 A
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
• at AC-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	6 kW
at 400 V rated value	6 kW
at 400 V rated value at 690 V rated value	6 kW 10.3 kW
at 400 V rated value at 690 V rated value operating apparent power at AC-6a	10.3 kW
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value	10.3 kW 12.2 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value	10.3 kW 12.2 kVA 21.3 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value	10.3 kW 12.2 kVA 21.3 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 21.5 kVA
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value lup to 690 V for current peak value n=30 rated value lup to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 21.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 30 s switching at zero current maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilmited to 1 s switching at zero current maximum Ilmited to 50 s switching at zero current maximum Ilmited to 30 s switching at zero current maximum Ilmited to 60 s switching at zero current maximum Ilmited to 60 s switching at zero current maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 21.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value limited to 1s switching at zero current maximum limited to 1 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum ro-load switching frequency at AC operating frequency	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 21.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 5 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum ro-load switching frequency at AC operating frequency at AC-1 maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 21.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum ro-load switching frequency at AC operating frequency at AC-1 maximum at AC-2 maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 21.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 192 A; Use minimum cross-section acc. to AC-1 rated value 193 A; Use minimum cross-section acc. to AC-1 rated value 194 A; Use minimum cross-section acc. to AC-1 rated value 195 O00 1/h 1 000 1/h 1 000 1/h 1 000 1/h
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum Alimited to 60 s switching at zero current maximum ro-load switching frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 160 1/h 1000 1/h 1000 1/h 750 1/h
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum ro-load switching frequency at AC operating frequency at AC-2 maximum at AC-3 maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 750 1/h 750 1/h 750 1/h
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum ro-load switching frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-4 maximum at AC-4 maximum at AC-4 maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 160 1/h 1000 1/h 1000 1/h 750 1/h
at 400 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum ro-load switching frequency at AC operating frequency at AC-2 maximum at AC-3 maximum	10.3 kW 12.2 kVA 21.3 kVA 23.3 kVA 25 kVA 8.1 kVA 14.2 kVA 15.5 kVA 499 A; Use minimum cross-section acc. to AC-1 rated value 341 A; Use minimum cross-section acc. to AC-1 rated value 260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 750 1/h 750 1/h 750 1/h

full-load current (FLA) for 3-phase AC motor 27 A ● at 480 V rated value 27 A ● at 600 V rated value 27 A yielded mechanical performance [hp] ● for single-phase AC motor 2 hp — at 110/120 V rated value 5 hp ● for 3-phase AC motor 5 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		
Special page factor control supply voltage rated value of magnet coll at 1.50 Hz		
		24 V
### ### ### ### ### ### ### ### ### ##		
apparent plack-up power of magnet coil at AC		0.0 1.1
### ### ### ### ### ### ### ### ### ##		0.0 1.1
Inductive power factor with closing power of the coll		77 \/A
apparent holding power of magnet coil at AC		TT VA
a do 0 Hz		0.00
Inductive power factor with the holding power of the coil 2.55		0.82
Inductive power factor with the holding power of the coll * al 50 Hz		0.0 \/ \
150 Hz		9.0 VA
A I AC AC AC AC AC AC AC		0.25
• at AC 416 ms • at Ac availlary circuit • authorized of NC contacts for auxiliary contacts instantaneous contact • authorized auxiliary contacts for auxiliary contacts instantaneous contact • authorized auxiliary contacts for auxiliary contacts instantaneous contact • authorized auxiliary contacts for auxiliary contacts instantaneous contact • authorized auxiliary contacts for auxiliary contacts instantaneous • authorized auxiliary contacts for auxiliary contacts • authorized auxiliary contact • authorized		0.25
a AC		9 40 mg
* al AC		6 40 IIIS
Actional time 10 10 ms Standard A1 - A2		4 46 mg
Control version of the switch operating mechanism Standard A1 - A2		
Auxiliary circuit		
number of NC contacts for auxiliary contacts instantaneous contact		Olanualu AT - AZ
contact 0 number of NO contacts for auxiliary contacts instantaneous contact 2 operational current at AC-12 maximum 10 A operational current at AC-15 4 at 230 V rated value 6 A • at 350 V rated value 3 A • at 450 V rated value 1 A • at 890 V rated value 10 A • at 48 V rated value 6 A • at 24 V rated value 6 A • at 80 V rated value 6 A • at 120 V rated value 3 A • at 120 V rated value 3 A • at 120 V rated value 3 A • at 120 V rated value 1 A • at 220 V rated value 1 A • at 220 V rated value 0.15 A • at 24 V rated value 2 A • at 48 V rated value 2 A • at 48 V rated value 2 A • at 48 V rated value 2 A • at 40 V rated value 0.9 A • at 120 V rated value 0.9 A • at 220 V rated value 0.9 A • at 220 V rated value 0.1 A • at 60 V rated value 0.7 A		
Operational current at AC-12 maximum 10 A		Z
operational current at AC-12 maximum 10 A operational current at AC-15 6 A a 1230 V rated value 3 A a 1500 V rated value 2 A at 500 V rated value 1 A operational current at DC-12 1 A at 24 V rated value 10 A at 48 V rated value 6 A at 100 V rated value 3 A at 110 V rated value 3 A at 125 V rated value 1 A at 220 V rated value 1 A at 220 V rated value 1 A at 220 V rated value 1 A at 260 V rated value 6 A at 260 V rated value 2 A at 48 V rated value 2 A at 48 V rated value 2 A at 26 V rated value 1 A at 27 V rated value 1 A at 27 V rated value 1 A at 28 V rated value 0.9 A at 29 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) ULCSA ratings 27 A <t< td=""><td></td><td>2</td></t<>		2
0		
		10 A
• at 400 V rated value	•	
• at 690 V rated value		
Parametric Par		
		1 A
	•	
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 operational current at DC-13 at 24 V rated value at 48 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 120 V rated value at 220 V rated value at 80 V rated value at 220 V rated value at 600 V rated value at 70 V rated value at 220 V rated value at 200 V rated		
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 o.15 A perational 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 125 V rated value at 120 V rated value at 120 V rated value at 20 V rated value at 200 V rated value at 200 V rated value at 800 V rated value at 800 V rated value at 800 V rated value at 600 V rated value at 1600 V rated value at 200 V rated value at 200 V rated value at 300 V rated value at 480 V rated value at 480 V rated value at 300 V rated value at 300 V rated value at 300 V rated value at 500 V rated value at 600 V rated value at 600 V rated value at 200 V rated value at 600 V rated value at 200 V rated value at 600 V rated value at 200 V rated value at 575/600 V rated value at 575/600 V rated value 20 bp at 575/600 V rated value 20 bp		
	at 60 V rated value	
	• at 110 V rated value	3 A
operational current at DC-13	at 220 V rated value	1 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 1125 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 0.3 A at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 27 A at 600 V rated value 27 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value 5 hp for 3-phase AC motor at 200 / 208 V rated value 10 hp 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 460/480 V rated value 25 hp 		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 220 V rated value at 600 V rated value at 480 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 7 A at 27 A at 600 V rated value at 7 A at 110/120 V rated value at 110/120 V rated value at 2 hp at 230 V rated value b 10 hp at 200/208 V rated value at 220/230 V rated value 10 hp at 460/480 V rated value at 460/480 V rated value at 575/600 V rated value 25 hp 	operational current at DC-13	
■ 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 600 V rated value ■ at 800 V rated value ■ at 800 V rated value ■ at 600 V rated value ■ at 110/120 V rated value ■ at 110/120 V rated value ■ at 110/120 V rated value ■ at 230 V rated value ■ for 3-phase AC motor ■ 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 460/480 V rated value ■ at 575/600	at 24 V rated value	
at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 110/120 V rated value at 110/120 V rated value at 230 V rated value at 230 V rated value at 220/230 V rated value at 220/230 V rated value at 460/480 V rated value at 4575/600 V rated value at 575/600 V rated value		
 at 125 V rated value at 220 V rated value at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 27 A at 600 V rated value 27 A yielded mechanical performance [hp] 4 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 5 hp - at 200/208 V rated value 10 hp - at 200/230 V rated value 10 hp - at 460/480 V rated value 20 hp - at 575/600 V rated value 25 hp		
■ at 220 V rated value ■ at 600 V rated value ■ at 600 V rated value ■ at 600 V rated value ■ 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 ■ for single-phase AC motor ■ at 110/120 V rated value ■ at 230 V rated value ■ for 3-phase AC motor ■ at 230 V rated value ■ for 3-phase AC motor ■ at 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		
● 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 27 A 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 — at 460/480 V rated value 20 hp — at 460/480 V rated value 20 hp — 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 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	at 220 V rated value	
### Fig. 10 Page 14 Page 15 P	at 600 V rated value	0.1 A
full-load current (FLA) for 3-phase AC motor 27 A ● at 480 V rated value 27 A ● at 600 V rated value 27 A yielded mechanical performance [hp] ● for single-phase AC motor 2 hp — at 110/120 V rated value 5 hp ● for 3-phase AC motor 5 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		1 faulty switching per 100 million (17 V, 1 mA)
 at 480 V rated value at 600 V rated value 27 A yielded mechanical performance [hp] for single-phase AC motor — at 110/120 V rated value — at 230 V rated value 5 hp for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 27 A 27 A 37 A 38 A 39 A 40 hp <l< td=""><td>UL/CSA ratings</td><td></td></l<>	UL/CSA ratings	
● 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 10 hp — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 27 A 2 hp 2 hp 4 hp 5 hp	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [hp]	• at 480 V rated value	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 at 200/208 V rated value for 40 ph for 3 ph for 50 ph for 50 ph for 50 ph for 50 ph for 50 ph	at 600 V rated value	27 A
 — 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 2 hp — at 575/600 V rated value 25 hp 	yielded mechanical performance [hp]	
 — 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 	 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	10 hp
·	— at 460/480 V rated value	20 hp
contact rating of auxiliary contacts according to UL A600 / Q600	— at 575/600 V rated value	25 hp
•	contact rating of auxiliary contacts according to UL	A600 / 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 (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	30. 1071 (000 4, 1 10 4)
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and
	backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
side-by-side mounting	Yes
height	102 mm
width	45 mm
depth	144 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 mm²)
 finely stranded with core end processing 	2x (1 6 mm²)
finely stranded without core end processing	2x (1 6 mm²)
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 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
for AWG cables for auxiliary contacts	2x (20 14)
AWG number as coded connectable conductor cross section	
• for main contacts	18 8
 for auxiliary contacts 	20 14

product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
B10 value with high demand rate according to SN 31920	450 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	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
04:5:41	

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>



EMC Sa	Functional Safety/Safety of Ma- chinery	Declaration of Conformity	Test Certificates
--------	---	---------------------------	-------------------



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













Marine / Shipping	other	Railway	Environment
-------------------	-------	---------	-------------



Confirmation



Confirmation

Vibration and Shock

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=3RT2027-2AB04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-2AB04

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

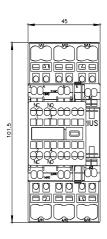
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-2AB04

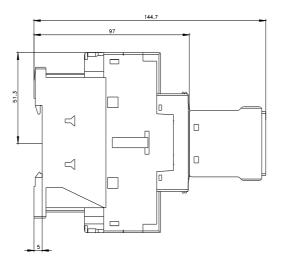
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

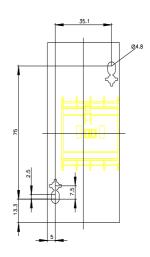
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-2AB04&lang=en

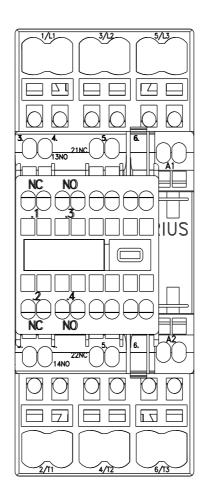
Characteristic: Tripping characteristics, I2t, Let-through current

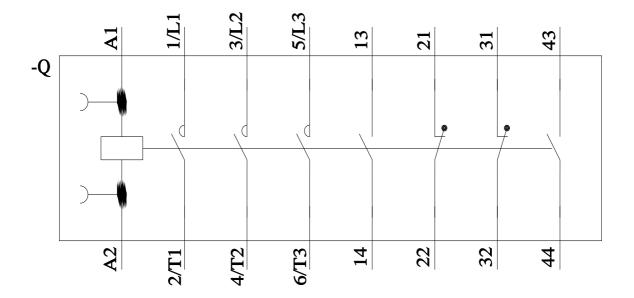
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-2AB04/char Further characteristics (e.g. electrical endurance, switching frequency)











last modified: 2/10/2023 🖸