Data sheet

Contactor, AC-3, 15 kW / 400 V, 2 NO + 2 NC, 110 V AC, 50 Hz, 120 V, 60 Hz, with inserted varistor, 3-pole, Size S0 screw terminal Captive auxiliary switch for SUVA applications



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 	8.1 W
• at AC in hot operating state per pole	2.7 W
Power loss [W] for rated value of the current without load current share typical	10.5 W
Surge voltage resistance	
of main circuit rated value	6 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for safe isolation	
 between coil and main contacts acc. to EN 60947-1 	400 V

Protestion along ID	
Protection class IP	IDOO
• on the front	IP20
of the terminal	IP20
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 (switching cycles)	
of contactor typical	10 000 000
 of the contactor with added electronics- compatible auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	К
Reference code acc. to DIN EN 81346-2	Q
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
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	
at 710 o rated value maximum	690 V
Operating current	690 V
	690 V
Operating current	690 V 50 A
Operating current ● at AC-1 at 400 V	
Operating current ■ at AC-1 at 400 V — at ambient temperature 40 °C rated value	
Operating current • at AC-1 at 400 V — at ambient temperature 40 °C rated value • at AC-1 — up to 690 V at ambient temperature 40 °C	50 A
Operating current • at AC-1 at 400 V — at ambient temperature 40 °C rated value • at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C	50 A 50 A
Operating current • at AC-1 at 400 V — at ambient temperature 40 °C rated value • at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value	50 A 50 A 42 A
Operating current • at AC-1 at 400 V — at ambient temperature 40 °C rated value • at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value • at AC-2 at 400 V rated value	50 A 50 A 42 A
Operating current • at AC-1 at 400 V — at ambient temperature 40 °C rated value • at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value • at AC-2 at 400 V rated value • at AC-3	50 A 50 A 42 A 32 A
Operating current at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1 up to 690 V at ambient temperature 40 °C rated value up to 690 V at ambient temperature 60 °C rated value at AC-2 at 400 V rated value at AC-3 at 400 V rated value at 500 V rated value	50 A 50 A 42 A 32 A
Operating current at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1 up to 690 V at ambient temperature 40 °C rated value up to 690 V at ambient temperature 60 °C rated value at AC-2 at 400 V rated value at AC-3 at 400 V rated value	50 A 50 A 42 A 32 A 32 A 32 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 mm²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	12 A
• at 690 V rated value	12 A
Operating 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	1 A
— at 440 V rated value	0.4.4
— at 440 v rateu value	0.4 A
— at 440 V rated value — at 600 V rated value	0.4 A 0.25 A
— at 600 V rated value	
— at 600 V rated value• with 2 current paths in series at DC-1	0.25 A
 at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value 	0.25 A 35 A
 at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 110 V rated value 	0.25 A 35 A 35 A
 at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 110 V rated value at 220 V rated value 	0.25 A 35 A 35 A 5 A
 at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 110 V rated value at 220 V rated value at 440 V rated value 	0.25 A 35 A 35 A 5 A 1 A
 at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value 	0.25 A 35 A 35 A 5 A 1 A
 at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value with 3 current paths in series at DC-1 	0.25 A 35 A 35 A 5 A 1 A 0.8 A
 at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value at 600 V rated value at 24 V rated value 	0.25 A 35 A 35 A 5 A 1 A 0.8 A

— at 600 V rated value	1.4 A
Operating current	
• 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-1	
— at 230 V rated value	16 kW
— at 230 V at 60 °C rated value	15.5 kW
— at 400 V rated value	28 kW
— at 400 V at 60 °C rated value	27.5 kW
— at 690 V rated value	48 kW
— at 690 V at 60 °C rated value	47.5 kW
• at AC-2 at 400 V rated value	15 kW
• 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
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
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 AC	5 000 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 1/h

Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
● at 50 Hz rated value	110 V
• at 60 Hz rated value	120 V
Operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of magnet coil at AC	
● at 50 Hz	81 V·A
● at 60 Hz	79 V·A
Inductive power factor with closing power of the coil	
● at 50 Hz	0.72
● at 60 Hz	0.74
Apparent holding power of magnet coil at AC	
● at 50 Hz	10.5 V·A
● at 60 Hz	8.5 V·A
Inductive power factor with the holding power of the	
coil	
● at 50 Hz	0.25
● at 60 Hz	0.28
Closing delay	
• at AC	8 40 ms
Opening delay	
• at AC	4 16 ms
Arcing time	10 10 ms

Number of NC contacts for auxiliary contacts 2 Number of NO contacts for auxiliary contacts 2 o instantaneous contact 2 Operating current at AC-12 maximum 10 A Operating current at AC-15 - • at 230 V rated value 6 A • at 400 V rated value 3 A • at 690 V rated value 1 A Operating current at DC-12 - • at 24 V rated value 10 A • at 48 V rated value 6 A • at 110 V rated value 3 A • at 125 V rated value 2 A • at 220 V rated value 1 A • at 220 V rated value 0.15 A Operating current at DC-13 - • at 24 V rated value 6 A • at 48 V rated value 2 A • at 60 V rated value 0.15 A Operating current at DC-13 - • at 24 V rated value 2 A • at 10 V rated value 2 A • at 10 V rated value 0.9 A • at 125 V rated value 0.9 A • at 20 V rated value	Control version of the switch operating mechanism	Standard A1 - A2
	Auxiliary circuit	
Number of NC contacts for auxiliary contacts	Number of NC contacts for auxiliary contacts	
• instantaneous contact 2 Operating current at AC-12 maximum 10 A Operating current at AC-15 • at 230 V rated value 6 A • at 400 V rated value 2 A • at 500 V rated value 1 A • at 690 V rated value 1 A Operating current at DC-12 • at 24 V rated value 10 A • at 60 V rated value 10 A • at 60 V rated value 10 A • at 60 V rated value 6 A • at 110 V rated value 10 A • at 125 V rated value 1 A • at 125 V rated value 1 A • at 600 V rated value 1 A • at 25 V rated value 1 A • at 25 V rated value 2 A • at 25 V rated value 1 A • at 600 V rated value 2 A • at 24 V rated value 2 A • at 22 V rated value 2 A • at 25 V rated value 2 A • at 25 V rated value 2 A • at 25 V rated value 3 A • at 25 V rated value 2 A • at 480 V rated value 3 A • at 220 V rated value 2 A • at 200 V rated value 2 A • at 800 V rated value 27 A Value 27 A Value 37 A Value 37 A Value 48 V rated value 27 A • at 800 V rated value 37 A Value 48 V rated value 39 A • at 800 V rated value 37 A Value 48 V rated value 37 A Value 48 V rated value 37 A Value 48 V rated value 39 A • at 800 V rated value 30 V rated value 40 V rated value 40 V rated value 40 V rated value 50 V rated value 40 V rated value 50 V rated value 40 V rated value 4	• instantaneous contact	2
Operating current at AC-12 maximum	Number of NO contacts for auxiliary contacts	
Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 80 V rated value • at 100 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 25 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 32 V rated value • at 32 V rated value • at 100 V rated value • at 220 V rated value • at 600 V rated value • at 27 A • at 230 V rated value • at 200 V rated value • at 200 V rated value • at 200 V rated value • at 600 V rated value • at 200 V rated value • at 200 V rated value • at 600 V rated value • at 600 V rated value	• instantaneous contact	2
* at 230 V rated value * at 400 V rated value * at 600 V rated value * at 690 V rated value * at 80 V rated value * at 80 V rated value * at 100 V rated value * at 100 V rated value * at 110 V rated value * at 110 V rated value * at 220 V rated value * at 220 V rated value * at 600 V rated value * at 80 V rated value * at 125 V rated value * at 100 V rated value * at 125 V rated value * at 120 V rated value * at 120 V rated value * at 600 V rated value	Operating current at AC-12 maximum	10 A
• at 400 V rated value 2 A • at 500 V rated value 2 A • at 690 V rated value 1 A Operating current at DC-12 • at 24 V rated value 6 A • at 80 V rated value 6 A • at 80 V rated value 6 A • at 110 V rated value 3 A • at 125 V rated value 2 A • at 220 V rated value 1 A • at 600 V rated value 1 A • at 600 V rated value 2 A • at 600 V rated value 5 A • at 600 V rated value 1 A • at 600 V rated value 2 A • at 110 V rated value 1 A • at 600 V rated value 1 A • at 600 V rated value 2 A • at 48 V rated value 2 A • at 48 V rated value 2 A • at 110 V rated value 2 A • at 60 V rated value 1 A • at 60 V rated value 1 A • at 60 V rated value 1 A • at 125 V rated value 1 A • at 125 V rated value 1 A • at 125 V rated value 1 A • at 126 V rated value 1 A • at 127 V rated value 1 A • at 128 V rated value 1 A • at 129 V rated value 1 A • at 600 V rated value 1 A •	Operating current at AC-15	
• at 500 V rated value 2 A • at 690 V rated value 1A Operating current at DC-12 • at 24 V rated value 6A • at 48 V rated value 6A • at 48 V rated value 6A • at 80 V rated value 6A • at 110 V rated value 3A • at 125 V rated value 2A • at 125 V rated value 1A • at 600 V rated value 1A • at 600 V rated value 2A • at 220 V rated value 2A • at 600 V rated value 1A • at 220 V rated value 2A • at 600 V rated value 3A • at 220 V rated value 3A • at 220 V rated value 3A • at 600 V rated value 3A • at 480 V rated value 3A • at 600 V rated va	at 230 V rated value	6 A
• at 690 V rated value 1 A Operating current at DC-12 • at 24 V rated value 6 A • at 48 V rated value 6 A • at 60 V rated value 6 A • at 110 V rated value 7 A • at 220 V rated value 7 A • at 220 V rated value 8 A • at 125 V rated value 9 A • at 220 V rated value 9 A • at 220 V rated value 9 A • at 24 V rated value 9 A • at 24 V rated value 9 A • at 24 V rated value 9 A • at 48 V rated value 9 A • at 48 V rated value 9 A • at 48 V rated value 9 A • at 40 V rated value 9 A • at 110 V rated value 9 A • at 110 V rated value 9 A • at 125 V rated value 9 A • at 125 V rated value 9 A • at 220 V rated value 9 A • at 220 V rated value 9 A • at 220 V rated value 9 A • at 600 V rated value 9 A • at 300 V rated value 9 A • at 200/208 V rated value 9 A • for three-phase AC motor 9 A • at 230 V rated value 9 A • for three-phase AC motor 9 A • for three-phase AC	• at 400 V rated value	3 A
Operating current at DC-12	• at 500 V rated value	2 A
 at 24 V rated value at 48 V rated value 6 A at 60 V rated value 6 A at 110 V rated value 3 A at 125 V rated value 2 A at 220 V rated value 1 A at 600 V rated value 15 A Operating current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value 2 A at 48 V rated value 2 A at 110 V rated value 1 A at 125 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 600 V rated value 27 A Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 600 V rated value at 7 A Vielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 200 V rated value by for three-phase AC motor at 200/208 V rated value for three-phase AC motor at 200/208 V rated value for three-phase AC motor at 200/208 V rated value for three-phase AC motor at 200/208 V rated value for three-phase AC motor at 200/208 V rated value for three-phase AC motor at 200/208 V rated value for three-phase AC motor at 200/208 V rated value for three-phase AC motor at 200/208 V rated value for three-phase AC motor 	• at 690 V rated value	1 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 600 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 26 V rated value • at 27 V rated value • at 28 V rated value • at 48 V rated value • at 10 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 27 A Yielded mechanical performance [hp] • for single-phase AC motor • at 230 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor • at 220 V rated value • for three-phase AC motor	Operating 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 0.15 A Operating current at DC-13 at 24 V rated value 6 A at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 20 V rated value at 60 V rated value at 60 V rated value at 20 V rated value at 20 V rated value at 60 V rated value 27 A Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 600 V rated value 27 A Ylelded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value 2 hp at 230 V rated value 5 hp for three-phase AC motor at 200/208 V rated value 10 hp at 200/208 V rated value 10 hp 	● at 48 V rated value	6 A
• at 125 V rated value 2 A • at 220 V rated value 1 A • at 600 V rated value 0.15 A Operating current at DC-13 • at 24 V rated value 6 A • at 48 V rated value 2 A • at 60 V rated value 2 A • at 110 V rated value 1 A • at 125 V rated value 2 A • at 110 V rated value 3 A • at 220 V rated value 1 A • at 125 V rated value 0.9 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 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 three-phase AC motor — at 200/208 V rated value 10 hp • for three-phase AC motor — at 200/208 V rated value 10 hp	• at 60 V rated value	6 A
• at 220 V rated value • at 600 V rated value • at 600 V rated value Operating 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 125 V rated value • at 220 V rated value • at 600 V rated value 27 A Vielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for three-phase AC motor — at 230 V rated value • for three-phase AC motor — at 200/208 V rated value • for three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 10 hp	• at 110 V rated value	3 A
• at 600 V rated value Operating 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 27 A Vielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for three-phase AC motor — at 230 V rated value • for three-phase AC motor — at 200/208 V rated value • for three-phase AC motor — at 200/208 V rated value • for three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 10 hp	• at 125 V rated value	2 A
Operating current at DC-13 • at 24 ∨ rated value 6 A • at 48 ∨ rated value 2 A • at 60 ∨ rated value 2 A • at 110 ∨ rated value 1 A • at 125 ∨ rated value 0.9 A • at 220 ∨ 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 three-phase AC motor 27 A • at 480 ∨ rated value 27 A • at 600 ∨ rated value 27 A Yielded mechanical performance [hp] • for single-phase AC motor 2 hp — at 230 ∨ rated value 5 hp • for three-phase AC motor 5 hp • for three-phase AC motor 10 hp — at 220/230 ∨ rated value 10 hp	• 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 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 600 V rated value at 7 A at 600 V rated value at 7 A Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 230 V rated value for three-phase AC motor at 200/208 V rated value 10 hp at 220/230 V rated value 10 hp 	• at 600 V rated value	0.15 A
at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value Dul/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 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 230 V rated value for three-phase AC motor — at 200/208 V rated value for three-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp	Operating current at DC-13	
 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 1 faulty switching per 100 million (17 V, 1 mA) Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-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 b for three-phase AC motor at 230 V rated value for three-phase AC motor at 200/208 V rated value 10 hp at 220/230 V rated value 10 hp 	• at 24 V rated value	6 A
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 contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 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 three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 10 hp — at 220/230 V rated value 10 hp	• at 48 V rated value	2 A
 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 three-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 2 pp at 230 V rated value b for three-phase AC motor at 200/208 V rated value at 200/208 V rated value at 200/208 V rated value b pp at 200/230 V rated value at 200/230 V rated value at 200/230 V rated value 	• at 60 V rated value	2 A
 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 three-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 5 hp for three-phase AC motor at 200/208 V rated value 10 hp at 220/230 V rated value 10 hp 	• at 110 V rated value	1 A
 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 three-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 three-phase AC motor at 200/208 V rated value at 200/230 V rated value hp at 220/230 V rated value 10 hp 10 hp 	• at 125 V rated value	0.9 A
Contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-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 three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 10 hp 10 hp	• at 220 V rated value	0.3 A
UL/CSA ratings Full-load current (FLA) for three-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 three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 10 hp — at 220/230 V rated value	• at 600 V rated value	0.1 A
Full-load current (FLA) for three-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 2 hp — at 230 V rated value 5 hp • for three-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp	Contact reliability of auxiliary contacts	1 faulty 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 three-phase AC motor at 200/208 V rated value at 220/230 V rated value 10 hp at 220/230 V rated value 10 hp 	UL/CSA ratings	
 at 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 for three-phase AC motor at 200/208 V rated value nat 220/230 V rated value 10 hp at 220/230 V rated value 10 hp 	Full-load current (FLA) for three-phase AC motor	
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 three-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp	• at 480 V rated value	27 A
 for single-phase AC motor — at 110/120 V rated value 2 hp — at 230 V rated value 5 hp for three-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp 	• at 600 V rated value	27 A
 — at 110/120 V rated value — at 230 V rated value • for three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 10 hp — at 220/230 V rated value 	Yielded mechanical performance [hp]	
 — at 230 V rated value ● for three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 10 hp 10 hp 	 for single-phase AC motor 	
 for three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 10 hp 10 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 230 V rated value	5 hp
— at 220/230 V rated value 10 hp	• for three-phase AC motor	
	— at 200/208 V rated value	10 hp
— at 460/480 V rated value 20 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
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)

nstallation/ mounting/ dimensions Mounting position	+/-180° rotation possible on vertical mounting surface; can be
Mountaing position	tilted forward and backward by +/- 22.5° on vertical mounting
	surface
Mounting type	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	141 mm
Required spacing	
 with side-by-side mounting 	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
• for grounded parts	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm

Connections/ Terminals	
Type of electrical connection	
• for main current circuit	screw-type terminals
 for auxiliary and control current 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)
 single or multi-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 conductors for main contacts 	2x (16 12), 2x (14 8)
Connectable conductor cross-section for main	
contacts	
• solid	1 10 mm²
• stranded	1 10 mm ²
finely stranded with core end processing	1 10 mm²
Connectable conductor cross-section for auxiliary	
contacts	
single or multi-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	
— single or multi-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 conductors for auxiliary contacts	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross	
section	40 0
• for main contacts	16 8
for auxiliary contacts	20 14
Safety related data	
B10 value	
 with high demand rate acc. to SN 31920 	1 000 000
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	40 %
 with high demand rate acc. to SN 31920 	73 %
Failure rate [FIT]	
• with low demand rate acc. to SN 31920	100 FIT
Product function	
 Mirror contact acc. to IEC 60947-4-1 	Yes
positively driven operation acc. to IEC 60947-5-	No
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Protection against electrical shock	finger-safe

Certificates/ approvals

General Product Approval







KC





EMC

Functional	Declaration of Conformity
Safety/Safety	
of Machinery	

Test Certificates

Marine / Shipping

Type Examination Certificate



Miscellaneous

Type Test Certificates/Test Report





Marine / Shipping











Confirmation

other



Further information

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

www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2027-1CK64-3MA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1CK64-3MA0

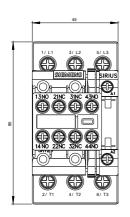
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1CK64-3MA0

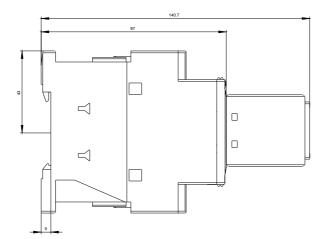
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-1CK64-3MA0&lang=en

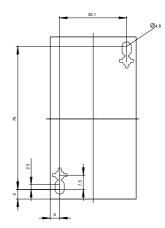
Characteristic: Tripping characteristics, I2t, Let-through current

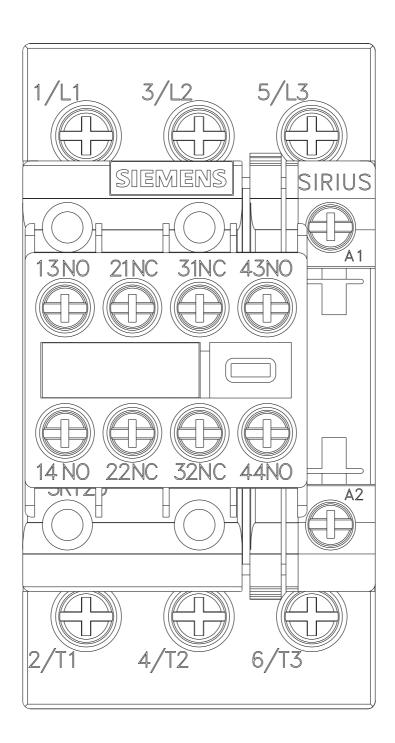
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1CK64-3MA0/char

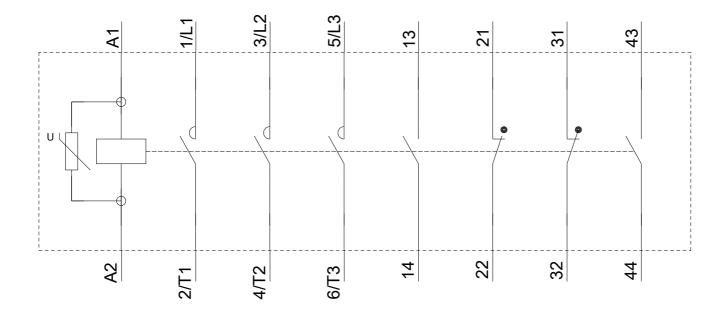
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-1CK64-3MA0&objecttype=14&gridview=view1











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