SIEMENS

Data sheet 3RT2016-1UB41



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 24 V DC, with integrated varistor, auxiliary contacts: 1 NO, screw terminal, size: S00 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S00
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	0.9 W
 at AC in hot operating state per pole 	0.3 W
without load current share typical	4 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 DC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at DC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	30 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V

 at AC-3e rated value maximum 	690 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C rated value	22 A
• at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	22 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	20 A
• at AC-3	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
 at AC-4 at 400 V rated value 	8.5 A
• at AC-5a up to 690 V rated value	19.4 A
• at AC-5b up to 400 V rated value	7.4 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	5.3 A
— up to 400 V for current peak value n=20 rated value	5.3 A
— up to 500 V for current peak value n=20 rated value	5.3 A
— up to 690 V for current peak value n=20 rated value	5 A
• at AC-6a	
 up to 230 V for current peak value n=30 rated value 	3.5 A
 up to 400 V for current peak value n=30 rated value 	3.5 A
 up to 500 V for current peak value n=30 rated value 	3.6 A
— up to 690 V for current peak value n=30 rated value	3.3 A
minimum cross-section in main circuit at maximum AC-1 rated	4 mm²
operational current for approx. 200000 operating cycles at	
AC-4 • at 400 V rated value	4.1 A
at 690 V rated value	
	3.3 A
operational current	3.3 A
operational current • at 1 current path at DC-1	
operational current • at 1 current path at DC-1 — at 24 V rated value	20 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value	20 A 20 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value	20 A 20 A 2.1 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value	20 A 20 A 2.1 A 0.8 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A
operational current ■ at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value	20 A 20 A 2.1 A 0.8 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 110 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A
operational current at 1 current path at DC-1 at 24 V rated value at 60 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 600 V rated value at 60 V rated value at 24 V rated value at 60 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 220 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 20 V rated value — at 60 V rated value — at 110 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 70 V rated value — at 20 V rated value — at 60 V rated value — at 10 V rated value — at 10 V rated value — at 440 V rated value — at 600 V rated value — at 440 V rated value — at 600 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 12 A 1.6 A 0.8 A 0.7 A
operational current at 1 current path at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 140 V rated value at 220 V rated value at 240 V rated value at 240 V rated value at 440 V rated value at 440 V rated value at 600 V rated value at 24 V rated value at 24 V rated value at 24 V rated value at 60 V rated value at 60 V rated value at 60 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A 20 A
operational current at 1 current path at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 220 V rated value at 440 V rated value at 440 V rated value at 450 V rated value at 450 V rated value at 600 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A 20 A 20 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 60 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 20 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A 20 A 20 A 20 A 20 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 440 V rated value — at 60 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 24 V rated value — at 440 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A
operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value • at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 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 600 V rated value — at 24 V rated value — at 440 V rated value — at 600 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A 20 A 20 A 20 A 20 A
operational current at 1 current path at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 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 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 29 V rated value at 20 V rated value at 20 V rated value at 440 V rated value at 600 V rated value at 600 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 2
operational current at 1 current path at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 220 V rated value at 440 V rated value at 440 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 60 V rated value at 440 V rated value at 600 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 2
operational current at 1 current path at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value at 60 V rated value at 110 V rated value at 220 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 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 29 V rated value at 20 V rated value at 20 V rated value at 440 V rated value at 600 V rated value at 600 V rated value	20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 2

- act 20 / raided value	with 2 current noths in series at DC 2 at DC 5	
	with 2 current paths in series at DC-3 at DC-5 at 24 V reted value.	20.4
with 3 current paths in series at DC-3 at DC-5		
		0.35 A
	-	20. A
— at 600 V rated value		
operating power • at AC-2 at 400 V rated value - at 200 V rated value - at 200 V rated value - at 690 V recent peak value n=20 rated value - up to 230 V for current peak value n=20 rated value - up to 800 V for current peak value n=20 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - up to 800 V for current peak value n=30 rated value - 13 kWA - 14 kWA - 15 kWA -		
eat AC-2 at 490 V rated value		0.2 A
- at 230 V rated value		4 kW
		TIV
		2.2 kW
at 500 V rated value at 690 V rated value at 690 V rated value at 690 V rated value at 230 V rated value at 230 V rated value at 500 V for current peak value n=20 rated value 20 ra		
at AC-3e at 230 V rated value at 230 V rated value 2.2 kW at 800 V rated value 3.5 kW operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value 2.5 kW operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value 2.5 kW operating apparent power at AC-6 up to 230 V for current peak value n=20 rated value 4.5 kW operating apparent power at AC-6 up to 230 V for current peak value n=20 rated value 4.6 kW up to 500 V for current peak value n=20 rated value 5.9 kW operating apparent power at AC-6 up to 500 V for current peak value n=20 rated value 4.6 kW up to 690 V for current peak value n=30 rated value 4.7 kW operating apparent power at AC-6 up to 230 V for current peak value n=30 rated value 4.7 kW operating apparent power at AC-6 up to 500 V for current peak value n=30 rated value 4.8 kW operating apparent power at AC-6 up to 500 V for current peak value n=30 rated value 4.8 kW operating apparent power at AC-6 up to 500 V for current peak value n=30 rated value 5.8 kW operating apparent power at AC-6 up to 500 V for current peak value n=30 rated value 4.8 kW operating apparent power at AC-6 up to 500 V for current peak value n=30 rated value 4.8 kW operating apparent power at AC-6 up to 500 V for current peak value n=30 rated value 4.8 kW operating apparent power at AC-6 up to 500 V for current peak value n=30 rated value 4.8 kW 1.1 kW operating to 10 s switching at zero current maximum 6. limited to 10 s switching at zero current maximum 6. limited to 10 s switching at zero current maximum 7.50 tW operating frequency 7.50 tW 7.5		
at AC-3e at 200 V rated value at 600 V rated value at 600 V rated value at 600 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value at 600 V rated value at 600 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 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value 4 kVA short-time withstand current in cold operating state up to 40 °C ilimited to 1 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum at NC-2 maximum at NC-2 maximum at AC-3 maximum at AC-4 maximum 50 th at AC-3 maximum 50 th at AC-4 maximum 50 th at AC-3 maximum 50 th at AC-4 maximum 50 th at AC-3 maximum 50 th 50 th 51 th 52 tV		
- at 230 V rated value - at 400 V rated value - at 500 V rated value - at 500 V rated value - at 500 V rated value - at 600 V rated value - up to 400 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 500 V for current peak value n=20 rated value - up to 500 V for current peak value n=20 rated value - up to 500 V for current peak value n=20 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 - up to 500 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 - up to 500 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 - up to 500 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 - up to 500 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 - up to 500 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 - up to 500 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 - up to 500 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 - up to 500 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 p		
- at 400 V rated value		2.2 kW
- at 500 V rated value - at 600 V rated value 5.5 kW operating power for approx. 200000 operating cycles at AC-4 * at 40 V rated value 2.5 kW operating apparent power at AC-6a * up to 230 V for current peak value n=20 rated value 2.5 kW operating apparent power at AC-6a * up to 500 V for current peak value n=20 rated value 4.6 kWA * up to 500 V for current peak value n=20 rated value 5.9 kWA operating apparent power at AC-6a * up to 230 V for current peak value n=20 rated value 4.6 kWA operating apparent power at AC-6a * up to 230 V for current peak value n=30 rated value 4.6 kWA * up to 500 V for current peak value n=30 rated value 4.7 kWA * up to 500 V for current peak value n=30 rated value 4.7 kWA * up to 500 V for current peak value n=30 rated value 4.7 kWA * up to 500 V for current peak value n=30 rated value 4.7 kWA * up to 500 V for current peak value n=30 rated value 5.7 kWA * up to 500 V for current peak value n=30 rated value 4.7 kWA * up to 500 V for current peak value n=30 rated value 5.7 kWA * up to 500 V for current peak value n=30 rated value 5.7 kWA * up to 500 V for current peak value n=30 rated value 5.7 kWA * up to 500 V for current peak value n=30 rated value 5.7 kWA * up to 500 V for current peak value n=30 rated value 5.7 kWA * up to 500 V for current peak value n=30 rated value 5.7 kWA * up to 500 V for current peak value n=30 rated value 5.7 kWA * up to 500 V for current peak value n=30 rated value 6.7 kWA * up to 500 V for current peak value n=30 rated value 7.0 kWA * up to 500 V for current peak value n=30 rated value 7.0 kWA * up to 500 V for current peak value n=30 rated value 7.0 kWA * up to 500 V for current peak value n=30 rated value 7.0 kWA * up to 550 V for current peak value n=30 rated value 7.0 kWA * up to 550 V for current peak value n=30 rated value 7.0 kWA * up to 550 V for current peak value n=30 rated value 7.0 kWA * up to 550 V for current peak value n=30 rated value 7.0 kWA * up to 550 V for current peak value n=30 rated value 7.0 kWA		
operating power for approx, 200000 operating cycles at AC-4 * at 400 V rated value 2 kW at 800 V rated value 2.5 kW 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 500 V for current peak value n=20 rated value * up to 500 V for current peak value n=20 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 * up to 500 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 * up to 500 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 * up to 500 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 * up to 500 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 * up to 500 V for current peak value n=30 rated value * up to 500 V for current maximum * limited to 10 s switching at zero current maximum * limited to 5 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * limited to 6 s switching at zero current maximum * at Inch to 6 switching at zero current maximum * limited to 6 switching at zero current maximum * at AC-3 maximum * at AC-4 maximum * at AC-5 maximum * at AC-5 maximum * at AC-5 ma		
operating power for approx. 200000 operating cycles at AC-4 * at 4400 V rated value * at 690 V rated value * at 690 V rated value * 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 * up to 500 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 * up to 500 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 * up to 500 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 * up to 690 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 * up to 500 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 * up to 690 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 10 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 10 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current max		
* at 400 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 500 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 500 V for current peak value n=30 rated value up to 230 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 up to 500 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 up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value in the 500 V for current peak value n=30 rated value in the 500 V for current peak value n=30 rated value il mitted to 1 s switching at zero current maximum il mitted to 1 s switching at zero current maximum il mitted to 10 s switching at zero current maximum il mitted to 10 s switching at zero current maximum il mitted to 60 s switching at zero current maximum il mitted to 60 s switching at zero current maximum il mitted to 60 s switching at zero current maximum il mitted to 60 s switching at zero current maximum il mitted to 60 s switching at zero current maximum il mitted to 60 s switching at zero current maximum il mitted to 60 s switching at zero current maximum il mitted to 60 s switching at zero current maximum il mitted to 60 switching frequency at C-3 maximum 1 000 1/h at AC-3 maximum at A		
operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value • up to 500 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=30 rated value • up to 230 V for current peak value n=30 rated value • up to 230 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 • up to 500 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 • up to 500 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 • up to 500 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 • up to 500 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 • up to 500 V for current peak value n=30 rated value • up to 500 V for current maximum • limited to 10 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 switching frequency • at DC • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum • at AC-5 maximum • at AC-5 maximum •	 at 400 V rated value 	2 kW
• 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 690 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 • up to 230 V for current peak value n=30 rated value • up to 230 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 • up to 500 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 • up to 690 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 • up to 690 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 • up to 690 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 • up to 690 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero curr	at 690 V rated value	2.5 kW
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 perating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 600 V for current peak value n=30 rated value up to 600 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 up to 690 V for current peak value n=30 rated value limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 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 limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current m	operating apparent power at AC-6a	
up to 500 V for current peak value n=20 rated value up to 890 V for current peak value n=20 rated value poerating 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 up to 690 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 up to 690 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 up to 690 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 up to 690 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 maximum up to 60 C up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up to 60 S switching at zero current maximum up t	 up to 230 V for current peak value n=20 rated value 	2 kVA
• 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 • up to 690 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 • with the to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • at DC	 up to 400 V for current peak value n=20 rated value 	3.6 kVA
operating apparent power at AC-6a • up to 230 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 • up to 500 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 • 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 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 10 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 • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 switching at zero current maximum • limited to 10 switching at zero current maximum • limited to 10 switching at zero current maximum • limited to 10 switching at zero current maximum • limited to 10 switching at zero current maximum • limited to 10 switching at zero current maximum • limited to 10 switching at zero current maximum • limited to 10 switching at zero current maximum • limited to 10 switching at zero switching at zero	 up to 500 V for current peak value n=20 rated value 	4.6 kVA
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 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 5 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 80 s switching at zero current maximum ilimited to 80 s switching at zero current maximum ilimited to 80 s switching at zero current maximum shimited to 80 s switching at zero current maximum at DC operating frequency at DC at AC-1 maximum at AC-2 maximum at AC-3 maximum total AC-4 maximum at AC-3 maximum at AC-3 maximum at AC-4 maximum be at AC-4 maximum at AC-3 maximum at AC-3 maximum at AC-3 maximum at AC-3 maximum at AC-4 maximum be at AC-4 maximum at AC-3 maximum be at AC-3 maximum at AC-3	up to 690 V for current peak value n=20 rated value	5.9 kVA
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 4 kVA short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 50 s witching at zero current maximum limited to 10 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 slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum and limited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum slimited to 60 s switching at zero c		
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 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum slimited to 60 s switching at zero current maximum no-load switching frequency at DC operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-3 maximum to 1000 1/h at AC-3 maximum at AC-3 maximum by at AC-4 maximum control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value full-scale value full-scale value with varistor with varistor		
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 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum state of 30 s switching at zero current maximum no-load switching frequency at DC 10 000 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-3 maximum 750 1/h at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value 0.8 full-scale value 1.1 design of the surge suppressor with varistor	·	
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 10 s switching at zero current maximum • limited to 10 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 55 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 10-load switching frequency • at DC 10 000 1/h operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value 1.1 design of the surge suppressor with varistor	·	
Ilmited to 1 s switching at zero current maximum 155 A; Use minimum cross-section acc. to AC-1 rated value		4 KVA
Ilimited to 5 s switching at zero current maximum Ilimited to 10 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 Ilimited to 60 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum Ino-load switching frequency Ilimited to 60 s switching frequency Ilimited to 60 s switching at zero current maximum Ino-load switching frequency Ilimited to 60 s switching at zero current maximum Ino-load switching frequency Ilimited to 60 s switching at zero current maximum Ino-load switching frequency Ilimited to 60 s switching at zero current maximum Ino-load switching frequency Ino-load switching frequency Ino-load switching frequency Ino-load switching frequency Ino-load switching at zero current maximum Ino-load swi		
Imited to 10 s switching at zero current maximum Imited to 30 s switching at zero current maximum Imited to 30 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero current maximum Imited to 60 s switching at zero part of	 limited to 1 s switching at zero current maximum 	155 A; Use minimum cross-section acc. to AC-1 rated value
Filmited to 30 s switching at zero current maximum	 limited to 5 s switching at zero current maximum 	111 A; Use minimum cross-section acc. to AC-1 rated value
Iminited to 60 s switching at zero current maximum In orload switching frequency In one at DC In one at AC-1 maximum In one at AC-2 maximum In one at AC-3 maximum In one at AC-4 maximum In o	-	86 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency • at DC 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-3 e maximum 750 1/h • at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value 1.1 design of the surge suppressor with varistor	• limited to 30 s switching at zero current maximum	66 A; Use minimum cross-section acc. to AC-1 rated value
at DC 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-3 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 control supply voltage at DC arated value 24 V operating range factor control supply voltage rated value of magnet coil at DC initial value aritical value aritical value 5.8 aritical value 6.8 aritical value 750 1/h 7	• limited to 60 s switching at zero current maximum	55 A; Use minimum cross-section acc. to AC-1 rated value
operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum • at AC-4 maximum • at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value • rated value • rated value • initial value • full-scale value • full-scale value design of the surge suppressor with varistor	no-load switching frequency	
 at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-3e maximum at AC-4 maximum at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value e rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor with varistor 	• at DC	10 000 1/h
 at AC-2 maximum at AC-3 maximum at AC-3e maximum at AC-4e ma	operating frequency	
at AC-3 maximum at AC-3e maximum at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC arated value operating range factor control supply voltage rated value of magnet coil at DC initial value at AC-3 maximum 750 1/h 750 1/h Control circuit/ Control DC 24 V OPERATOR OF THE STATE OF	• at AC-1 maximum	1 000 1/h
 at AC-3e maximum at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value 0.8 full-scale value tith varistor 	• at AC-2 maximum	750 1/h
 at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor 	• at AC-3 maximum	750 1/h
type of voltage of the control supply voltage control supply voltage at DC • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value design of the surge suppressor DC 24 V 08 08 1.1 with varistor	• at AC-3e maximum	750 1/h
type of voltage of the control supply voltage control supply voltage at DC • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value design of the surge suppressor DC 24 V 08 1.1 with varistor		250 1/h
control supply voltage at DC • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value design of the surge suppressor 24 V 0.8 1.1 design of the surge suppressor with varistor		
 rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor 24 V 0.8 with varistor 		DC
operating range factor control supply voltage rated value of magnet coil at DC		
magnet coil at DC		24 V
 initial value full-scale value design of the surge suppressor with varistor 		
● full-scale value 1.1 design of the surge suppressor with varistor		0.8
design of the surge suppressor with varistor		

holding nower of magnet sail at DC	AW
holding power of magnet coil at DC	4 W
closing delay	20 100 mg
• at DC	30 100 ms
opening delay	7 13 ms
• at DC arcing time	7 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	Standard AT - AZ
number of NO contacts for auxiliary contacts instantaneous	1
contact	'
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	10 A
at 400 V rated value	3 A
at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at DC-12	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
at 125 V rated value	2 A
• at 220 V rated value	1 A
at 600 V rated value	0.15 A
operational current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
at 60 V rated value	2 A
at 110 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 3-phase AC motor	
at 480 V rated value	7.6 A
at 600 V rated value	9 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
 at 110/120 V rated value 	0.33 hp
— at 230 V rated value	1 hp
• for 3-phase AC motor	
 at 200/208 V rated value 	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	7.5 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: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
 — with type of assignment 2 required 	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
side-by-side mounting	Yes
height	58 mm
width	45 mm
depth	73 mm
	. •1

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-tyne terminals
	screw-type terminals screw-type terminals
for auxiliary and control circuit	
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	0 (0 - 4 - 0) 0 (0 - 0 - 0) 0
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
• stranded	0.5 4 mm ²
finely stranded with core end processing	0.5 2.5 mm ²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm ²
finely stranded with core end processing	0.5 2.5 mm ²
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12
AWG number as coded connectable conductor cross	
section	
• for main contacts	20 12
for auxiliary contacts	20 12
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	No
suitability for use safety-related switching OFF	Yes
B10 value with high demand rate according to SN 31920	1 000 000
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
Certificates/ approvals	
General Product Approval	
Ocheral Froduct Approval	





Confirmation







Functional EMC Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Cer**tificate**





Type Test Certificates/Test Report

Special Test Certific-<u>ate</u>

Marine / Shipping













Marine / Shipping

other

Railway

Dangerous Good

Environment



Confirmation



Vibration and Shock

Transport Information

Environmental Con**firmations**

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,...)

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2016-1UB41

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-1UB41

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

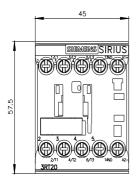
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2016-1UB41&lang=en

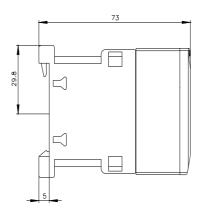
Characteristic: Tripping characteristics, I2t, Let-through current

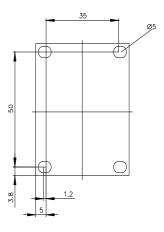
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1UB41/char

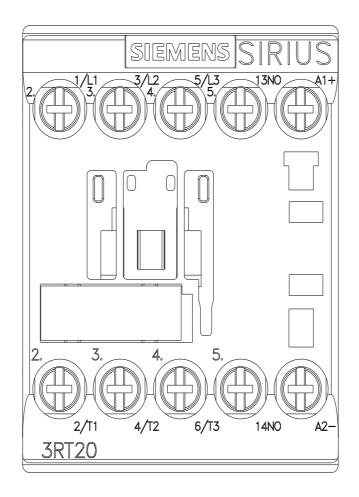
Further characteristics (e.g. electrical endurance, switching frequency)

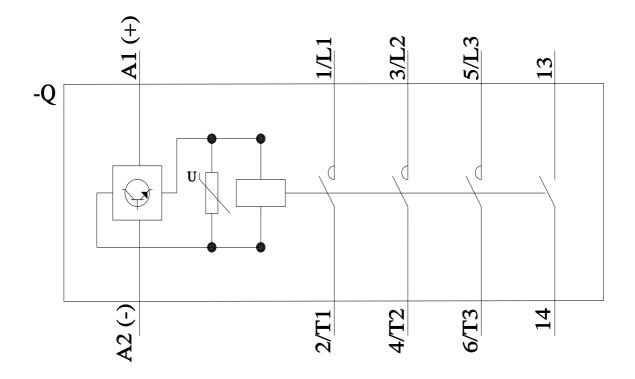
3RT2016-1UB41&objecttype=14&gridview=view1











last modified: 8/15/2023 🖸