SIEMENS

Data sheet 3RT2015-1BB41



Power contactor, AC-3 7 A, 3 kW / 400 V 1 NO, 24 V DC 3-pole, Size S00 screw terminal

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	1.2 W
• per pole	0.4 W
power loss [W] for rated value of the current without load current share typical	4 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
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 (switching cycles)	
of contactor typical	30 000 000
 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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009
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 acc. 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

operational current		
** at AC-1 at 400 V at ambient temperature 40 °C rafed value ** ** up to 680 V at ambient temperature 40 °C rafed value ** ** up to 580 V at ambient temperature 60 °C rafed value ** ** up to 580 V at ambient temperature 60 °C rafed value ** ** at AC-3 up to 690 V at advalue ** ** at AC-4 up to 7 vated value ** ** at AC-5 up to 690 V rated value ** ** at AC-5 up to 690 V rated value ** ** at AC-5 up to 690 V rated value ** ** at AC-5 up to 690 V 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		690 V
Falled value	operational current	
		18 A
	• at AC-1	
rated value — up to 860 V at ambient temperature 60 °C rated value — at 400 V rated value — at 500 V rated value — at 600 V rated value — 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 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 — at 24 V rated value — at 24 V rated value — at 600 V rated va		18 A
rated value * at ACO V rated value - at 500 V rated value - at 500 V rated value * at AC-2 at 400 V rated value * at AC-3 up to 630 V rated value * at AC-3 up to 630 V rated value * at AC-3 up to 630 V rated value * at AC-3 up to 630 V rated value * at AC-5 up to 400 V for current peak value n=20 rated value - 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 690 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 - at 600 V rate	rated value	
at 400 V rated value at 500 V rated value at 500 V rated value at 1500 V rated value at 1500 V rated value at 1600 V rated value		10 A
- at 500 V rated value - at 690 V rated value 6.5 A 4.9 A 6.5 A 4.10 OV rated value 6.5 A 5.8 A 5.8 A 5.8 A 6.5 A	• at AC-3	
at 690 V rated value • at AC-4 at 400 V rated value • at AC-5 bup to 400 V rated value • at AC-5 bup to 400 V rated value • at AC-5 bup to 400 V rated value • at AC-5 bup to 400 V rated value 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 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 at 650 V rated value at 24 V rated value at 24 V rated value at 600 V rated value	— at 400 V rated value	7 A
at AC-4 at 400 V rated value at AC-5s up to 690 V rated value at AC-5s up to 690 V rated value at AC-5s up to 690 V rated value at AC-5s — 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 500 V for current peak value n=20 rated value — 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 — at 690 V rated value — at 690 V rated value — at 110 V rated value — at 690 V rated value — at 600 V rated value — at 200 V rated value — at 600 V rated value — at 120 V rated value — at 600 V rated value — at 600 V rated value — at 110 V rated value — at 120 V rated value — at 140 V rated value	— at 500 V rated value	6 A
• at AC-5a up to 690 V rated value 5.8 A • at AC-5b up to 400 V roted value 5.8 A • at AC-5b up to 400 V roterent 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 • 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 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 — at 600 V rated value — at 600 V rated value — at 100 V rated value — at 100 V rated value — at 100 V rated value — at 600 V rated value — at 600 V rated value — at 100 V rated value — at 200 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value — at 200 V rated value — at 600 V rated value —	— at 690 V rated value	4.9 A
• at AC-5b up to 400 V rated value 5.8 Å • at AC-6b 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=20 rated value — up to 600 V for current peak value n=20 rated value — 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 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 2.5 mm² rated value 0.6 A 3 at 600 V rated value 4 at 400 V rated value 5 at 600 V rated value 6 at 600 V rated value 6 at 600 V rated value 7 at 7 at 600 V rated value 7 at 600 V rated value 7 at 600 V rated value 7 at 7 at 600 V rated value 7 at 7	 at AC-4 at 400 V rated value 	6.5 A
• at AC-5b up to 400 V rated value 5.8 Å • at AC-6b 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=20 rated value — up to 600 V for current peak value n=20 rated value — 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 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 2.5 mm² rated value 0.6 A 3 at 600 V rated value 4 at 400 V rated value 5 at 600 V rated value 6 at 600 V rated value 6 at 600 V rated value 7 at 7 at 600 V rated value 7 at 600 V rated value 7 at 600 V rated value 7 at 7 at 600 V rated value 7 at 7	• at AC-5a up to 690 V rated value	15.8 A
• at AC-8a — 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 • at AC-8a — 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 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 — at 400 V rated value n=30 rated value — at 400 V rated value — at 400 V rated value — at 100 V rated value — at 100 V rated value — at 2.5 mm² 2.5 mm² 2.5 mm² 2.6 A 3.8 A 2.7 A 2.7 A 2.8 m² 2.8 m² 2.9 mm² 2.9 mm		
value — up to 400 V for current peak value n=20 rated value — up to 590 V for current peak value n=20 rated value — up to 590 V for current peak value n=20 rated value • at AC-6a — up to 230 V for current peak value n=30 rated value • at AC-6a — 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 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — up to 590 V for current peak value n=30 rated value — at 690 V rated value — at 690 V rated value — at 24 V rated value — at 220 V rated value — at 440 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value — at		5.5 A
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 230 V for current peak value n=30 rated value — 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 — up to 690 V for current peak value n=30 rated value — up to 690 V for current peak value n=30 rated value — operational current for approx. 200000 operating cycles at AC-4		4 A
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 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 — 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 — ot 400 V rated value — at 400 V rated value — at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 24 V rated value — at 440 V rated value — at 44	value	4 A
value ● 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 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 minimum cross-section in main circuit at maximum AC-1 rated value minimum cross-section in main circuit at maximum AC-1 rated value poperational current for approx. 200000 operating cycles at AC-4 ■ at 400 V rated value ■ at 690 V rated value ■ at 100 V rated value ■ at 110 V rated value — at 24 V rated value — at 24 V rated value — at 440 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 440 V rated value — at 600 V rat	value	
value	value	3.6 A
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 operational current for approx. 200000 operating cycles at AC-4 at 400 V rated value at 690 V rated value at 400 V rated value at 24 V rated value at 110 V rated value at 420 V rated value at 440 V rated value at 440 V rated value at 600 V rated value at 110 V rated value at 110 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 24 V rated value at 440 V rated value at 24 V rated value at 440 V rated value at 24		2.7 A
value 2.4 A minimum cross-section in main circuit at maximum AC-1 rated value 2.5 mm² operational current for approx. 200000 operating cycles at AC-4 at 400 V rated value 2.6 A • at 4500 V rated value 1.8 A operational current 1.8 A operational current 1.5 A • at 1 current path at DC-1 1.5 A — at 24 V rated value 1.5 A — at 110 V rated value 0.6 A — at 440 V rated value 0.42 A — at 600 V rated value 0.42 A — at 110 V rated value 1.5 A — at 22V V rated value 1.5 A — at 110 V rated value 1.2 A — at 440 V rated value 1.2 A — at 440 V rated value 0.5 A • with 3 current paths in series at DC-1 1.5 A — at 220 V rated value 1.5 A — at 24 V rated value 0.5 A • with 3 current paths in series at DC-1 1.5 A — at 24 V rated value 0.5 A — at 220 V rated value 0.5 A — at 440 V rated value 0.5 A		2.7 A
value 2.5 mm² minimum cross-section in main circuit at maximum AC-1 rated value 2.5 mm² operational current for approx. 200000 operating cycles at AC-4 at 400 V rated value 2.6 A • at 690 V rated value 1.8 A operational current • at 1 current path at DC-1 - at 24 V rated value 1.5 A - at 110 V rated value 0.6 A - at 440 V rated value 0.42 A - at 600 V rated value 0.42 A • with 2 current paths in series at DC-1 1.5 A - at 24 V rated value 1.5 A - at 110 V rated value 8.4 A - at 220 V rated value 1.2 A - at 440 V rated value 0.6 A - at 440 V rated value 0.5 A • with 3 current paths in series at DC-1 1.5 A - at 22 V rated value 1.5 A - at 110 V rated value 1.5 A - at 22 V rated value 1.5 A - at 440 V rated value 1.5 A - at 22 V rated value 0.9 A - at 440 V rated value 0.9 A - at 24 V rated value 0.7 A <td></td> <td>2.5 A</td>		2.5 A
rated value operational current for approx. 200000 operating cycles at AC-4		2.4 A
e at 400 V rated value		2.5 mm²
● at 690 V rated value 1.8 A operational current ● at 1 current path at DC-1 15 A — at 24 V rated value 1.5 A — at 110 V rated value 0.6 A — at 440 V rated value 0.42 A — at 600 V rated value 0.42 A ● with 2 current paths in series at DC-1 15 A — at 24 V rated value 8.4 A — at 220 V rated value 1.2 A — at 440 V rated value 0.6 A — at 600 V rated value 0.5 A ● with 3 current paths in series at DC-1 15 A — at 24 V rated value 15 A — at 110 V rated value 15 A — at 440 V rated value 15 A — at 440 V rated value 0.9 A — at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 — at 24 V rated value • at 1 current path at DC-3 at DC-5 — at 24 V rated value • at 110 V rated value 0.1 A		
operational current • at 1 current path at DC-1 — at 24 V rated value 1.5 A — at 110 V rated value 0.6 A — at 440 V rated value 0.42 A — at 600 V rated value 0.42 A • with 2 current paths in series at DC-1 — at 24 V rated value 1.5 A — at 110 V rated value 1.5 A — at 110 V rated value 1.2 A — at 440 V rated value 0.6 A — at 600 V rated value 1.5 A — at 110 V rated value 1.5 A — at 220 V rated value 1.5 A — at 110 V rated value 1.5 A — at 110 V rated value 1.5 A — at 440 V rated value 1.5 A — at 440 V rated value 0.9 A — at 600 V rated value 0.9 A — at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 — at 24 V rated value 1.5 A — at 24 V rated value 0.7 A	at 400 V rated value	2.6 A
• at 1 current path 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 24 V rated value — at 24 V rated value — at 110 V rated value — at 110 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 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 40 V rated value — at 40 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 110 V rated value — 0.1 A	 at 690 V rated value 	1.8 A
- at 24 V rated value 1.5 A - at 110 V rated value 0.6 A - at 220 V rated value 0.42 A - at 600 V rated value 0.42 A • with 2 current paths in series at DC-1 - at 24 V rated value 1.5 A - at 110 V rated value 8.4 A - at 220 V rated value 1.2 A - at 440 V rated value 1.2 A - at 440 V rated value 0.6 A - at 600 V rated value 0.5 A • with 3 current paths in series at DC-1 - at 24 V rated value 1.5 A - at 110 V rated value 1.5 A - at 110 V rated value 0.5 A • with 3 current paths in series at DC-1 - at 24 V rated value 15 A - at 110 V rated value 15 A - at 220 V rated value 15 A - at 220 V rated value 15 A - at 440 V rated value 0.9 A - at 600 V rated value 0.9 A - at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 15 A - at 110 V rated value 0.7 A	operational current	
- at 110 V rated value	at 1 current path at DC-1	
- at 220 V rated value 0.6 A - at 440 V rated value 0.42 A - at 600 V rated value 0.42 A • with 2 current paths in series at DC-1 - at 24 V rated value 15 A - at 110 V rated value 8.4 A - at 220 V rated value 1.2 A - at 440 V rated value 0.6 A - at 600 V rated value 0.5 A • with 3 current paths in series at DC-1 - at 24 V rated value 15 A - at 110 V rated value 15 A - at 110 V rated value 15 A - at 220 V rated value 15 A - at 220 V rated value 15 A - at 240 V rated value 15 A - at 240 V rated value 15 A - at 240 V rated value 0.9 A - at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 15 A - at 24 V rated value 0.7 A	•	15 A
- at 220 V rated value 0.6 A - at 440 V rated value 0.42 A - at 600 V rated value 0.42 A • with 2 current paths in series at DC-1 - at 24 V rated value 15 A - at 110 V rated value 8.4 A - at 220 V rated value 1.2 A - at 440 V rated value 0.6 A - at 600 V rated value 0.5 A • with 3 current paths in series at DC-1 - at 24 V rated value 15 A - at 110 V rated value 15 A - at 110 V rated value 15 A - at 220 V rated value 15 A - at 220 V rated value 15 A - at 240 V rated value 15 A - at 240 V rated value 15 A - at 240 V rated value 0.9 A - at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 15 A - at 24 V rated value 0.7 A		
at 440 V rated value 0.42 A at 600 V rated value 0.42 A • with 2 current paths in series at DC-1 at 24 V rated value 15 A at 110 V rated value 8.4 A at 220 V rated value 1.2 A at 440 V rated value 0.6 A at 600 V rated value 0.5 A • with 3 current paths in series at DC-1 at 24 V rated value 15 A at 110 V rated value 15 A at 220 V rated value 15 A at 220 V rated value 15 A at 440 V rated value 15 A at 440 V rated value 15 A at 440 V rated value 0.9 A at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 at 24 V rated value 15 A at 110 V rated value 0.7 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 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 440 V rated value — at 4600 V rated value — at 600 V rated value — at 600 V rated value — at 740 V rated value — at 110 V rated value — at 24 V rated value — at 110 V rated value — at 110 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 240 V rated value at 440 V rated value at 600 V rated value 5 A with 3 current paths in series at DC-1 at 24 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 1 current path at DC-3 at DC-5 at 24 V rated value at 10 V rated value at 110 V rated value 		
- at 24 V rated value		0.7 <i>L</i> / (
- at 110 V rated value 8.4 A - at 220 V rated value 1.2 A - at 440 V rated value 0.6 A - at 600 V rated value 0.5 A • with 3 current paths in series at DC-1 - at 24 V rated value 15 A - at 110 V rated value 15 A - at 220 V rated value 15 A - at 440 V rated value 0.9 A - at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 15 A - at 110 V rated value 0.7 A		15 A
- at 220 V rated value		
- at 440 V rated value 0.6 A - at 600 V rated value 0.5 A • with 3 current paths in series at DC-1 - at 24 V rated value 15 A - at 110 V rated value 15 A - at 220 V rated value 15 A - at 440 V rated value 0.9 A - at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 15 A - at 110 V rated value 0.7 A		
- at 600 V rated value 0.5 A • with 3 current paths in series at DC-1 - at 24 V rated value 15 A - at 110 V rated value 15 A - at 220 V rated value 15 A - at 440 V rated value 0.9 A - at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 15 A - at 110 V rated value 0.7 A		
 with 3 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 1 current path at DC-3 at DC-5 at 24 V rated value at 110 V rated value 15 A at 110 V rated value 0.1 A 		
- at 24 V rated value 15 A - at 110 V rated value 15 A - at 220 V rated value 15 A - at 440 V rated value 0.9 A - at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 15 A - at 110 V rated value 0.1 A		0.5 A
 — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value ■ at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value — at 110 V rated value 	with 3 current paths in series at DC-1	
 — at 220 V rated value — at 440 V rated value — at 600 V rated value ● at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value — 0.1 A 	— at 24 V rated value	15 A
 — at 440 V rated value 0.9 A — at 600 V rated value 0.7 A • at 1 current path at DC-3 at DC-5 — at 24 V rated value 15 A — at 110 V rated value 0.1 A 	— at 110 V rated value	15 A
 at 600 V rated value at 1 current path at DC-3 at DC-5 at 24 V rated value at 110 V rated value 0.7 A 15 A 0.1 A 	— at 220 V rated value	15 A
 at 600 V rated value at 1 current path at DC-3 at DC-5 at 24 V rated value at 110 V rated value 0.7 A 15 A 0.1 A 	— at 440 V rated value	0.9 A
 at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value 0.1 A 	— at 600 V rated value	
 — at 24 V rated value — at 110 V rated value 15 A 0.1 A 		
— at 110 V rated value 0.1 A	-	15 A

— at 24 V rated value	15 A
— at 110 V rated value	0.25 A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 110 V rated value	15 A
— at 220 V rated value	1.2 A
— at 440 V rated value	0.14 A
— at 600 V rated value	0.14 A
operating power	
• at AC-3	
— at 230 V rated value	1.5 kW
— at 400 V rated value	3 kW
— at 500 V rated value	3 kW
— at 690 V rated value	4 kW
operating power for approx. 200000 operating cycles at AC-4	
at 400 V rated value	1.15 kW
at 690 V rated value	1.15 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	1.5 kV·A
 up to 400 V for current peak value n=20 rated value 	2.7 kV·A
 up to 500 V for current peak value n=20 rated value 	3.3 kV·A
• up to 690 V for current peak value n=20 rated value	4.3 kV·A
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	1 kV·A
 up to 400 V for current peak value n=30 rated value 	1.8 kV·A
 up to 500 V for current peak value n=30 rated value 	2.2 kV·A
• up to 690 V for current peak value n=30 rated value	2.9 kV·A
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	120 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	86 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	67 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	52 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	43 A; Use minimum cross-section acc. to AC-1 rated value
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-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
rated value	24 V
operating range factor control supply voltage rated	
value of magnet coil at DC	0.0
• initial value	0.8
• full-scale value	1.1
closing power of magnet coil at DC	4 W
holding power of magnet coil at DC	4 W
closing delay	20 100 mg
• at DC	30 100 ms
opening delay ● at DC	7 13 ms
	7 13 ms 10 15 ms
arcing time	Standard A1 - A2
control version of the switch operating mechanism	Stanuaru AT - AZ
Auxiliary circuit	1
number of NO contacts for auxiliary contacts instantaneous contact	1

operational current at AC 12 maximum	10.4
operational current at AC-12 maximum operational current at AC-15	10 A
•	40.4
at 230 V rated value at 400 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	40.4
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	4.8 A
at 600 V rated value	6.1 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.75 hp
for 3-phase AC motor	·
— at 200/208 V rated value	1.5 hp
— at 220/230 V rated value	2 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	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,
— with type of assignment 2 required	gG. 20A (690V, 100KA), aivi: 16A (690V, 100KA), BS88: 20A (415V, 80KA)
 for short-circuit protection of the auxiliary switch 	gG: 10 A (500 V, 1 kA)
required	
Installation/ mounting/ dimensions	
mounting position	./ 1000 1 5 11 5 11 5 1 5 1 5 1 5 1 5 1 5
	+/-180° rotation possible on vertical mounting surface; can be tilted
for the color of the color of	forward and backward by +/- 22.5° on vertical mounting surface
fastening method	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail
	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
side-by-side mounting	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes
side-by-side mounting height	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm
• side-by-side mounting height width	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm 45 mm
side-by-side mounting height width depth	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm
• side-by-side mounting height width	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm 45 mm
side-by-side mounting height width depth	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm 45 mm
• side-by-side mounting height width depth required spacing	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm 45 mm
side-by-side mounting height width depth required spacing with side-by-side mounting	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm 45 mm 73 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm 45 mm 73 mm
side-by-side mounting height width depth required spacing with side-by-side mounting — forwards — upwards	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 58 mm 45 mm 73 mm

— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
 for live parts 	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
 for auxiliary and control circuit 	screw-type terminals
 at contactor for auxiliary contacts 	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
 for main contacts 	
— solid	2x (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)
at AWG cables for main contacts	2x (20 16), 2x (18 14), 2x 12
connectable conductor cross-section for main	
contacts	0.5 4 mm²
• solid	0.5 4 mm²
stranded finely stranded with core and processing	0.5 4 mm² 0.5 2.5 mm²
finely stranded with core end processing	0.5 2.5 IIIIII ⁻
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 2x 12
AWG number as coded connectable conductor cross	
section	
• for main contacts	20 12
for auxiliary contacts	20 12
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
T1 value for proof test interval or service life acc. to IEC 61508	20 y
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
 safety-related switching OFF 	Yes
Certificates/ approvals	
General Product Approval	

General Product Approval



Confirmation





<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate UK Declaration of Conformity



Special Test Certificate

Type Test Certificates/Test Report

Test Certificates

Marine / Shipping

Miscellaneous











Marine / Shipping

other

Dangerous Good





Confirmation



<u>Transport Information</u>

Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2015-1BB41

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2015-1BB41

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1BB41

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

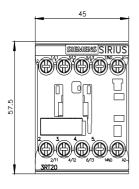
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2015-1BB41&lang=en

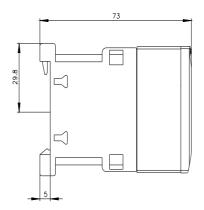
Characteristic: Tripping characteristics, I2t, Let-through current

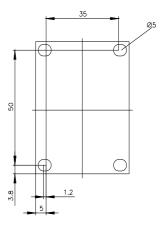
https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1BB41/char

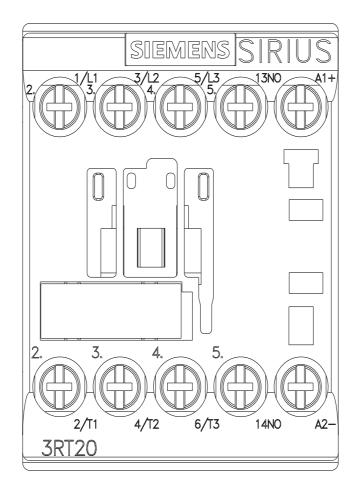
Further characteristics (e.g. electrical endurance, switching frequency)

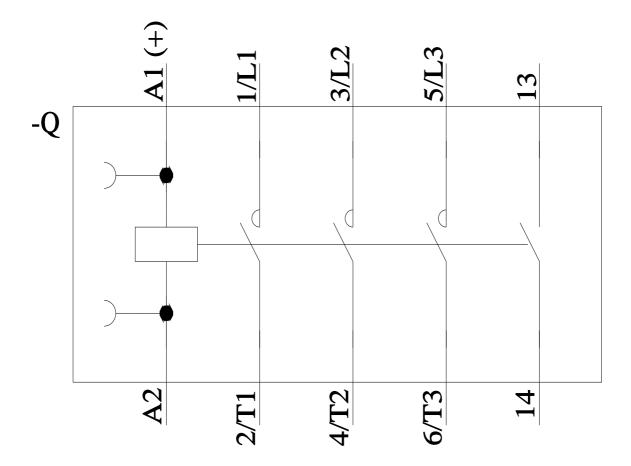
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2015-1BB41&objecttype=14&gridview=view1











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