## **SIEMENS**

Data sheet 3RT2025-1BB40

power contactor, AC-3 17 A, 7.5 kW / 400 V 1 NO + 1 NC, 24 V DC 3-pole, Size S0 screw terminal



Product brand name	SIRIUS
Product designation	Power contactor
Product type designation	3RT2

General technical data		
Size of contactor	S0	
Product extension		
<ul> <li>function module for communication</li> </ul>	No	
Auxiliary switch	Yes	
Power loss [W] for rated value of the current		
<ul> <li>at AC in hot operating state</li> </ul>	2.7 W	
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.9 W	
Power loss [W] for rated value of the current without	5.9 W	
load current share typical		
Surge voltage resistance		
<ul> <li>of main circuit rated value</li> </ul>	6 kV	
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV	
maximum permissible voltage for safe isolation		
<ul> <li>between coil and main contacts acc. to EN</li> </ul>	400 V	
60947-1		

Protection class IP	
• on the front	IP20
• of the terminal	IP20
Shock resistance at rectangular impulse	
• at DC	10g / 5 ms, 7,5g / 10 ms
Shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 10 ms
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
• of the contactor with added electronics-	5 000 000
compatible auxiliary switch block typical	
<ul> <li>of the contactor with added auxiliary switch</li> </ul>	10 000 000
block typical	
Reference code acc. to DIN EN 81346-2	Q
Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
Main circuit	
Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
Operating voltage	
at AC-3 rated value maximum	690 V
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C	40 A
rated value	
— up to 690 V at ambient temperature 60 °C	35 A
rated value	
• at AC-2 at 400 V rated value	17 A
• at AC-3	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
	13 A
— at 690 V rated value	
<ul><li>— at 690 V rated value</li><li>● at AC-4 at 400 V rated value</li></ul>	15.5 A
• at AC-4 at 400 V rated value	15.5 A 35.2 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-3</li> <li>at 400 V rated value</li> </ul>	17 A 17 A 17 A 13 A

<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	11.4 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	11.4 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	11.4 A
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	11.3 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	7.6 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	7.6 A
<ul><li>up to 500 V for current peak value n=30 rated value</li></ul>	7.6 A
<ul><li>up to 690 V for current peak value n=30 rated value</li></ul>	7.6 A
Minimum cross-section in main circuit	
<ul> <li>at maximum AC-1 rated value</li> </ul>	10 mm²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	7.7 A
• at 690 V rated value	7.7 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
<ul><li>with 2 current paths in series at DC-1</li></ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
Operating current	