# **SIEMENS**

Data sheet 3RT2016-2AH01



Power contactor, AC-3 9 A, 4 kW / 400 V 48 V AC, 50 / 60 Hz, 3-pole, Size S00 Spring-type terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S00
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>	0.9 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.3 W
<ul> <li>without load current share typical</li> </ul>	4.2 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (switching cycles)	
of contactor typical	30 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-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		
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	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	
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	5.3 A	
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	5.3 A	
<ul> <li>up to 690 V for current peak value n=20 rated value</li> <li>at AC-6a</li> </ul>	5 A	
— up to 230 V for current peak value n=30 rated value	3.5 A	
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	3.5 A	
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	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 value operational current for approx. 200000 operating	4 mm <sup>2</sup>	
cycles at AC-4		
at 400 V rated value	4.1 A	
at 690 V rated value	3.3 A	
operational current		
• at 1 current path at DC-1		
— at 24 V rated value	20 A	
— at 110 V rated value	2.1 A	
— at 220 V rated value	0.8 A	
— at 440 V rated value	0.6 A	
— at 600 V rated value	0.6 A	
with 2 current paths in series at DC-1	0.07.	
— at 24 V rated value	20 A	
— at 24 V rated value  — at 110 V rated value	12 A	
— at 110 V rated value  — at 220 V rated value	1.6 A	
— at 440 V rated value	0.8 A	
— at 600 V rated value	0.7 A	
<ul> <li>with 3 current paths in series at DC-1</li> </ul>		

	at 0.4 M rated value	20.4
	— at 24 V rated value	20 A
• at 1 current path at DC-3 at DC-5 — at 24 V rated value • with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value • with 3 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 20 V rated value — at 20 V rated value — at 20 V rated value — at 40 V rated value — at 400 V rated value — at 800 V rated value — at 800 V rated value — at 900 V for current pask value n=20 rated value — up to 500 V for current pask value n=20 rated value — up to 500 V for current pask value n=20 rated value — up to 500 V for current pask value n=20 rated value — up to 500 V for current pask value n=30 rated value — up to 500 V for current pask value n=30 rated value — up to 500 V for current pask value n=30 rated value — up to 500 V for current pask value n=30 rated value — up to 500 V for current pask value n=30 rated value — up to 500 V for current pask value n=30 rated value — up to 500 V for current pask value n=30 rated		
		1 A
	-	
• with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value • with 3 current paths in series at DC-3 at DC-5 — at 24 V rated value • with 3 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 600 V rated value — at 600 V rated value — at 800 V rated value — at 900 V for current pask 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=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 400 V for current peak value n=30 rated value — up to 400 V for 000 V for current for value — up to 400 V for 000 V for current for value — up to 400 V for 000 V for current for value — up to 400 V for current for value — up to 400 V for current for value — up to 500 V for current for value — up to 500 V for current for value —		
	— at 110 V rated value	0.1 A
with 3 current paths in series at DC-3 at DC-5	<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
• with 3 current paths in series at DC-3 at DC-5  — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 220 V rated value — 20 A  — at 220 V rated value — 20 A  — at 230 V rated value — at 40.3 — at 230 V rated value — at 500 V rated value — at 500 V rated value — at 600 V rated value — at 600 V rated value — at 400 V rated value — at 400 V rated value — at 600 V rocurrent 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=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  ininited to 1 s switching at zero current maximum — ininited to 1 s switching at zero current maximum — ininited to 10 s switching at zero current maximum — ininited to 30 s switching at zero current maximum — ininited to 60 s switching at zero current maximum — ininited to 60 s switching at zero current maximum — ininited to 60 s switching at zero current maximum — ininited to 60 s switching at zero current maximum — ininited to 60 s switching at zero current maximum — ininited to 60 s switching at zero current maximum — ininited to 60 s switching at zero current maximum — ininited to 60 s switching at zero current maximum — inin	— at 24 V rated value	20 A
	— at 110 V rated value	0.35 A
- 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 - at 600 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value - at 690 V rated value - at 690 V rated value - at 400 V rated value - at 690 V roted value - at 690 V rot 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	<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
at 220 V rated value at 600 V rated value at 400 V rated value at 400 V rated value at 400 V rated value at 690 V rated value at	— at 24 V rated value	20 A
Departing power   eat AC-3	— at 110 V rated value	20 A
operating power  at AC-3  — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 400 V rated value — at 690 V ror 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=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 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 to cold operating state — up to 600 V for current to 600 s switching at zero current maximum — limited to 10 s switching at zero current maximum — limited to 60 s switching at zero current maximu	— at 220 V rated value	1.5 A
operating power  • at AC-3  — at 230 V rated value — at 400 V rated value — at 690 V rated value — at 690 V rated value — at 400 V rated value — at 690 V rated value  operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value  operating power for approx. 200000 operating cycles at AC-4  • 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 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 • limited to 10 s switching at zero current maximum • limited to 50 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 •	— at 440 V rated value	0.2 A
• at AC-3  — at 230 V rated value — at 400 V rated value — at 690 V ro 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=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 — timited to 1s switching at zero current maximum — timited to 5s switching at zero current maximum — timited to 3s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching at zero current maximum — timited to 30 s switching	— at 600 V rated value	0.2 A
- at 230 V rated value - at 400 V rated value - at 690 V rated value - at 690 V rated value - at 230 V rated value - at 400 V rated value - at 400 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 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 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=60 rated value - up to 600 V for current peak value n=60 rated value - up to 600 V for current peak value n=60 rated value - up to 600 V for current peak value n=60 rated value - up to 600 V for cur	operating power	
- at 400 V rated value - at 500 V rated value - at 690 V rated value - at 230 V rated value - at 230 V rated value - at 400 V rated value - at 400 V rated value - at 690 V rated value - at 680 V rated value	• at AC-3	
- at 500 V rated value - at 690 V rated value - at 230 V rated value - at 230 V rated value - at 400 V rated value - at 690 V rated value - at 500 V rated value - at 690 V rated value	— at 230 V rated value	2.2 kW
- at 690 V rated value - at 230 V rated value - at 300 V rated value - at 400 V rated value - at 590 V rated value - at 690 V rated value  operating power for approx. 200000 operating cycles at AC-4  • at 400 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 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=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 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 • 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 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 at zero current maximum • limited to 60 switching at zero current maximum • limited to 60 switching at zero current maximum • limited to 60 switching at zero current maximum • limited to 60 switching at zero current maximum • limited to 60	— at 400 V rated value	4 kW
at AC-3e  at 230 V rated value  at 500 V rated value  at 690 V rated value  at 4 kW  at 4 kW  perating power for approx. 200000 operating cycles at AC-4  at 400 V rated value  at 690 V rated value  at 690 V rated value  at 690 V rated value  au pt 0 230 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 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  burpt 40 °C  illimited to 1 s switching at zero current maximum  illimited to 5 s switching at zero current maximum  illimited to 30 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 s switching at zero current maximum  illimited to 60 switching at zero current maximum  illimi	— at 500 V rated value	4 kW
- at 230 V rated value - at 400 V rated value - at 590 V rated value - at 690 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 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 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 400 °C • limited to 1 s switching at zero current maximum • limited to 5 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 maxim	— at 690 V rated value	5.5 kW
- at 400 V rated value - at 500 V rated value 5 kW  operating power for approx. 200000 operating cycles at AC-4  • at 400 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 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 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 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=60 value number of current value value number of cu	• at AC-3e	
- at 500 V rated value - at 690 V rated value 5 kW  operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value • at 690 V rated value • up to 200 V rated value • up to 200 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 500 V for current peak value n=20 rated value operating apparent power at AC-6a • 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 in to 60 v 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 5 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum no-load switching frequency • at AC-1 maximum • at AC-3 maximum • at AC-4 maximum	— at 230 V rated value	2.2 kW
operating power for approx. 200000 operating cycles at AC-4  • at 400 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 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 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 short-time withstand current in cold operating state up to 40 °C • 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 60 s switching at zero current maximum • limited	— at 400 V rated value	4 kW
operating power for approx. 200000 operating cycles at AC-4  • at 400 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 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 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 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 500 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 50 s switching at zero current maximum • limited to 60 s switching at zero curre	— at 500 V rated value	4 kW
operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value • at 690 V rated value • up to 230 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 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 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 50 s switching at zero current maximum • limited to 60 s switching at zero curre	— at 690 V rated value	5 kW
at AC-4  • at 400 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 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 690 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 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 10 s switching at zero current maximum • limited to 60 s switching at zero cur		
• at 690 V rated value  operating apparent power at AC-6a  • up to 230 V for current peak value n=20 rated value • up to 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 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 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 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 60 s switching at zero		
operating apparent power at AC-6a  • up to 230 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 230 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 • limited to 1 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 • 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  100 00 1/h  100 00 1/h  • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum	<ul> <li>at 400 V rated value</li> </ul>	2 kW
<ul> <li>up to 230 V for current peak value n=20 rated value</li> <li>up to 400 V for current peak value n=20 rated value</li> <li>up to 500 V for current peak value n=20 rated value</li> <li>up to 690 V for current peak value n=20 rated value</li> <li>up to 690 V for current peak value n=20 rated value</li> <li>up to 230 V for current peak value n=30 rated value</li> <li>up to 400 V for current peak value n=30 rated value</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> <li>thVA</li> <li>4 kVA</li> <li>3.1 kVA</li> <li>4 kVA</li> <li>4 kVA</li> <li>155 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>66 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>66 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>66 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>55 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>66 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>67 Use minimum cross-section acc. to AC-1 rated value</li> <li>68 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>69 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>60 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>60 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>61 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>62 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>63 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>64 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>65 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>65 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>65 A; Use minimum cross-section acc. to AC-1 rat</li></ul>	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=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 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 peak value n=30 rated value • up to 690 V for 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 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum  750 A; Use minimum cross-section acc. to AC-1 rated value  10 000 1/h • at AC-1 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum	operating apparent power at AC-6a	
up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6 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 short-time withstand current in cold operating state up to 40 °C  limited to 1 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 at AC-1 maximum roo-load switching frequency at AC  operating frequency at AC-1 maximum 1 0000 1/h  at AC-2 maximum AC-3 maximum 750 1/h at AC-3 maximum 750 1/h at AC-4 maximum 750 1/h at AC-4 maximum 750 1/h at AC-4 maximum 750 1/h  control circuit/ Control	• 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 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 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value  short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 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  oload switching frequency • at AC  operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-6 maximum • at AC-7 maximum • at AC-8 maximum • at AC-9 maxim	• up to 500 V for current peak value n=20 rated value	4.6 kVA
<ul> <li>up to 230 V for current peak value n=30 rated value</li> <li>up to 400 V for current peak value n=30 rated value</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> <li>short-time withstand current in cold operating state up to 40 °C</li> <li>limited to 1 s switching at zero current maximum</li> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>1000 1/h</li> <li>at AC-1 rated value</li> <li>1000 1/h</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>250 1/h</li> </ul> Control circuit/ Control	• 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 short-time withstand current in cold operating state up to 40 °C  limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching	operating apparent power 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 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C  limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching		1.3 kVA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> <li>short-time withstand current in cold operating state up to 40 °C</li> <li>limited to 1 s switching at zero current maximum</li> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60</li></ul>		
• 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 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 70 s switching at zero current maximum  • limited to 1		
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 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  for indicated to 60 s switching at zero current maximum  no-load switching frequency • at AC  10 000 1/h  operating frequency • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum	·	
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 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 30 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 30 s switching at zero current maximum  • limited to 6A; Use minimum cross-section acc. to AC-1 rated value  • 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 6A; Use minimum cross-section acc. to AC-1 rated value  • 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 6A; Use minimum cross-section		
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s. Use minimum cross-section acc. to AC-1 rated value</li> <li>limited to 40 s. Use minimum cross-section acc. to AC-1 rated value</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current max</li></ul>		
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>st AC</li> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-6 maximum</li> <li>at AC-7 maximum</li> <li>at AC-1 maximum</li> <li>at AC-1 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-5 maximum</li> <li>at AC-6 maximum</li> <li>at AC-7 maximum</li> <li>at AC-7 maximum</li> <li>at AC-8 maximum</li> <li>at AC-9 maximum</li> <li>at AC-1 maximum</li> <li>at AC-1 maximum</li> <li>at AC-3 maximum</li> <li>at AC-1 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-6 maximum</li> <li>at AC-7 maximum</li> <li>at AC-8 maximum</li> <li>at AC-9 maximum</li> <li></li></ul>	<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	155 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency</li> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 e maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 ontrol circuit/ Control</li> </ul>	<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	
<ul> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency</li> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3e maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-6 maximum</li> <li>at AC-7 maximum</li> <li>at AC-8 maximum</li> <li>at AC-9 maximum</li> <li>at AC-9 maximum</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-6 maximum</li> <li>at AC-7 maximum</li> <li>at AC-8 maximum</li> <li>at AC-9 maximum</li></ul>	_	
<ul> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency</li> <li>at AC</li> <li>10 000 1/h</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3e maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-50 1/h</li> <li>at AC-60 maximum</li> <li>at AC-70 maximum</li> <li>at AC-80 maximum</li> <li>at AC-90 maximum</li> <li>at AC</li></ul>		
no-load switching frequency       10 000 1/h         operating frequency       1 000 1/h         • at AC-1 maximum       1 000 1/h         • at AC-2 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-3e maximum       750 1/h         • at AC-4 maximum       250 1/h         Control circuit/ Control		
● at AC  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  Control circuit/ Control		
operating frequency       1 000 1/h         • at AC-1 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-3e maximum       750 1/h         • at AC-4 maximum       250 1/h         Control circuit/ Control		10 000 1/h
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3e maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>250 1/h</li> </ul> Control circuit/ Control		
<ul> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3e maximum</li> <li>at AC-3e maximum</li> <li>at AC-4 maximum</li> <li>250 1/h</li> </ul> Control circuit/ Control		1 000 1/h
<ul> <li>at AC-3 maximum</li> <li>at AC-3e maximum</li> <li>at AC-4 maximum</li> <li>250 1/h</li> </ul> Control circuit/ Control		
at AC-3e maximum     at AC-4 maximum     250 1/h  Control circuit/ Control		
• at AC-4 maximum  Control circuit/ Control		
Control circuit/ Control		
		200 1/11
type of voltage of the control supply voltage		AC
control comply voltage of AC		AC
control supply voltage at AC	control supply voltage at AC	

<ul> <li>at 50 Hz rated value</li> </ul>	48 V
at 60 Hz rated value	48 V
operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	27 VA
● at 60 Hz	24.3 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.8
• at 60 Hz	0.75
apparent holding power of magnet coil at AC	
● at 50 Hz	4.2 VA
at 60 Hz	3.3 VA
inductive power factor with the holding power of the	
coil	0.05
• at 50 Hz	0.25
• at 60 Hz	0.25
closing delay	0. 25
• at AC	9 35 ms
opening delay	7. 40
• at AC	7 13 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul> <li>at 230 V rated value</li> </ul>	10 A
<ul> <li>at 400 V rated value</li> </ul>	3 A
<ul> <li>at 500 V rated value</li> </ul>	2 A
at 690 V rated value	1 A
operational current at DC-12	
<ul> <li>at 24 V rated value</li> </ul>	10 A
<ul> <li>at 48 V rated value</li> </ul>	6 A
<ul> <li>at 60 V rated value</li> </ul>	6 A
<ul> <li>at 110 V rated value</li> </ul>	3 A
<ul> <li>at 125 V rated value</li> </ul>	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
<ul><li>at 110 V rated value</li></ul>	1 A
<ul> <li>at 125 V rated value</li> </ul>	0.9 A
<ul> <li>at 220 V rated value</li> </ul>	0.3 A
<ul> <li>at 600 V rated value</li> </ul>	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	,p
— at 200/208 V rated value	2 hp
	7 THE

4.0001000011		
— 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	0.054 (000) (400) 4) 44 004 (000) (400) 4) 5000 054 (445) (001 4)	
— with type of coordination 1 required	gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)	
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 20A (690V,100kA), aM: 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	+/-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 standard mounting rail according to DIN EN 60715	
side-by-side mounting	Yes	
height	70 mm	
width	45 mm	
depth	73 mm	
required spacing		
<ul><li>with side-by-side mounting</li></ul>		
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	0 mm	
<ul> <li>for grounded parts</li> </ul>		
— forwards	10 mm	
— upwards	10 mm	
— at the side	6 mm	
— downwards	10 mm	
for live parts	40	
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	6 mm	
Connections/ Terminals		
type of electrical connection		
for main current circuit	spring-loaded terminals	
for auxiliary and control circuit     at contactor for auxiliary contactor	spring-loaded terminals	
at contactor for auxiliary contacts     of magnet coil	Spring-type terminals	
of magnet coil  type of connectable conductor cross sections	Spring-type terminals	
type of connectable conductor cross-sections  • for main contacts		
— solid	2v (0.5 4 mm²)	
— solid — solid or stranded	2x (0.5 4 mm²) 2x (0,5 4 mm²)	
Solid of stranded     finely stranded with core end processing	2x (0.5 4 mm²) 2x (0.5 2.5 mm²)	
— finely stranded with core end processing     — finely stranded without core end processing	2x (0.5 2.5 mm²)	
at AWG cables for main contacts	2x (0.3 2.3 mm) 2x (20 12)	
connectable conductor cross-section for main	- (-v 12)	
contacts		
• solid	0.5 4 mm²	
• stranded	0.5 4 mm²	
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²	
finely stranded without core end processing	0.5 2.5 mm²	
connectable conductor cross-section for auxiliary contacts		
<ul> <li>solid or stranded</li> </ul>	0.5 4 mm²	
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>	
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>	

#### type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded 2x (0,5 ... 4 mm<sup>2</sup>) - finely stranded with core end processing 2x (0.5 ... 2.5 mm<sup>2</sup>) - finely stranded without core end processing 2x (0.5 ... 2.5 mm²) • at AWG cables for auxiliary contacts 2x (20 ... 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 Yes; with 3RH29 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 100 FIT 31920 T1 value for proof test interval or service life according to 20 y IEC 61508 IP20 protection class IP on the front according to IEC touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front suitability for use • safety-related switching OFF Yes

### Certificates/ approvals

#### **General Product Approval**



Confirmation





<u>KC</u>



Functional EMC Safety/Safety of Declaration of Conformity Machinery	Test Certificates
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Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

## Marine / Shipping













Marine / Shipping other



Confirmation



Confirmation

**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=3RT2016-2AH01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-2AH01

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-2AH01

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2016-2AH01&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-2AH01/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-2AH01&objecttype=14&gridview=view1

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