# **SIEMENS**

Data sheet 3RT2016-4AP62



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 220 V AC, 50 Hz / 240 V, 60 Hz, auxiliary contacts: 1 NC, ring cable lug connection, size: S00

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>	4.4 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	
of main circuit rated value	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at 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 (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	30 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
of the contactor with added auxiliary switch block typical	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		
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V	
at AC-3e rated value maximum	690 V	
operational current		
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated</li> </ul>	22 A	
value		
• 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 °C rated	20 A	
value	2071	
• at AC-3		
— at 400 V rated value	9 A	
— at 500 V rated value	7.7 A	
— at 690 V rated value	6.7 A	
• at AC-3e		
— at 400 V rated value	9 A	
— at 500 V rated value	7.7 A	
— at 690 V rated value	6.7 A	
• at AC-4 at 400 V rated value	8.5 A	
• at AC-5a up to 690 V rated value	19.4 A	
• at AC-5b up to 400 V rated value	7.4 A	
• at AC-6a		
— up to 230 V for current peak value n=20 rated value	5.3 A	
— up to 400 V for current peak value n=20 rated value	5.3 A	
— up to 500 V for current peak value n=20 rated value	5.3 A	
— up to 690 V for current peak value n=20 rated value	5 A	
• at AC-6a		
— up to 230 V for current peak value n=30 rated value	3.5 A	
— up to 400 V for current peak value n=30 rated value	3.5 A	
— up to 500 V for current peak value n=30 rated value	3.6 A	
— up to 690 V for current peak value n=30 rated value	3.3 A	
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm²	
operational current for approx. 200000 operating cycles at		
AC-4	44.0	
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 60 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		
— at 24 V rated value	20 A	
— at 60 V rated value	20 A	
— at 110 V rated value	12 A	
— 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 24 V rated value	20 A	
— at 60 V rated value	20 A	
— at 110 V rated value	20 A	
— at 220 V rated value	20 A	
— at 440 V rated value	1.3 A	
— at 600 V rated value	1 A	
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>		

at 24 V rated value at 110 V rated value at 24 V rated value at 100 V rated value at 200 V rated value at 400 V rated value at 500 V rated value at 50		
- at 110 V rated value	— at 24 V rated value	20 A
• with 2 current paths in series at DC-3 at DC-5  — at 24 V rated value — at 01 V rated value — at 110 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value — at 20 V rated value — at 40 V rated value — at 600 V rated value — at 600 V rated value • at AC-3 — at 230 V rated value • at AC-3 — at 230 V rated value • at AC-3 — at 230 V rated value • at AC-3 — at 230 V rated value • at AC-3 — at 230 V rated value • at AC-3 — at 230 V rated value • at AC-3 — at 230 V rated value — at 660 V rated value — at 660 V rated value — at 660 V rated value • at 660 V rated value — at 660 V rated value • at	— at 60 V rated value	0.5 A
	— at 110 V rated value	0.15 A
	<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 60 V rated value  ### at 400 V rated value  ### at 60 V rated value  ### at 40 V rated value  ### at 60 V rated value  ### at 40 V rated value  ### at 40 V rated value  ### at 60 V rated	— at 24 V rated value	20 A
• with 3 current paths in series at DC-3 at DC-5  — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 20 V rated value — at 20 V rated value — at 400 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value • at AC-2 at 400 V rated value • at AC-2 at 400 V rated value — at 400 V rated value — at 400 V rated value — at 500 V rated value — at 600 V rated value manue — at 600 V rated value — a	— at 60 V rated value	5 A
at 24 V rated value	— at 110 V rated value	0.35 A
at 24 V rated value	with 3 current paths in series at DC-3 at DC-5	
at 60 V rated value at 110 V rated value at 220 V rated value at 220 V rated value at 440 V rated value at 440 V rated value at 600 V rated value at 400 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 890 V rated value at 400 V rated value at 890 V rated value at 8		20 A
Operating power		
operating power  at AC-2 at 400 V rated value  at AC-3  — at 230 V rated value  — at 400 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 rated value  2 kW  sea 690 V rated value  1 kW  sea 690 V rated value  1 kW  sea 690 V rated value  1 kW		
at AC-2 at 400 V rated value     at AC-3     al AC-3     al AC-3     al AC-3     al AC-3     al 400 V rated value     al 400 V rated value     al 690 V rated value     al 690 V rated value     al 690 V rated value     al 400 V rated value     al 690 V roted value     al 690 V rot current peak value n=20 rated value     al 690 V rot current peak value n=20 rated value     al 690 V for current peak value n=20 rated value     al 690 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 900 V for current peak value n=30 rated value     al 900 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak value n=30 rated value     al 600 V for current peak 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 800 V rated value     ■ at AC-3e     — at 230 V rated value     ■ at 400 V rated value     — at 400 V rated value     — at 500 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=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     ■ to 500 V for current peak value n=30 rated value     ■ up to 500 V for current peak value n=30 rated value     ■ to 500 V for current peak value n=30 rated value     ■ to 500 V for current peak value n=30 rated value     ■ to 500 V for current peak value n=30 rated value     ■ to 500 V for current peak value n=30 rated value     ■ to 500 V for current peak value n=30 rated value     ■ to 500 V for current peak va		4 134/
- 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 500 V rated value - at 400 V rated value - at 400 V rated value - at 500 V rated value - at 500 V rated value - at 500 V rated value - at 690 V rated value - 2 kW - at 690 V rated value - 2 kW - operating apparent power at AC-5a - 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 - 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=50 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=50 rated value - up to 600 V for current peak value n=50 rated value - up to 600 V for current peak value n=50 rated value - up to 600 V for current peak value n=50 rated value - up to 600 V for current peak value n=50 rated value -		4 KVV
- at 400 V rated value - at 500 V rated value - at 690 V rated value • at AC-3e  - at 230 V rated value - at 500 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=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 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 • 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=50 rated value • up to 500 V for current peak value n=50 rated value • up to 500 V f		
- at 500 V rated value - at 800 V rated value  • at AC-3e - at 230 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value • at 400 V rated value • at 690 V 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 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 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 • timited to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 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		
- at 690 V rated value  - at 400 V rated value  - at 400 V rated value  - at 500 V rated value  - at 690 V rated value  - at 600 V rated value  - at 6		
at AC-3e — at 230 V rated value — at 500 V rated value — at 500 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  2 kW  2.5 kW  operating apparent power at AC-6a  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 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  iup to 500 V for current peak value n=30 rated value  iup to 500 V for current peak value n=30 rated value  iup to 500 V for current peak value n=30 rated value  ilimited to 1 s switching at zero current maximum  ilimited to 1 s switching at zero current maximum  ilimited to 30 s switching at zero current maximum  ilimited to 50 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum  ilimited to 60 s switching at zero current maximum	— at 500 V rated value	4 kW
- at 230 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value - 2 kW - 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 400 V for current peak value n=20 rated value - up to 400 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 - 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 590 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 r	— at 690 V rated value	5.5 kW
- at 400 V rated value - 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 230 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=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 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 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 1 s switching at zero current maximum • limited to 5 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 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	• at AC-3e	
- at 500 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 • 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=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 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 • 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 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero 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	— at 230 V rated value	2.2 kW
- 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 rocurrent 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 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 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 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 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 frequency • at AC  operating frequency • at AC-1 maximum • at AC-2 maximum  1 000 1/h  750 1/h	— 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 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=20 rated value  operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 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 • thin the switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • 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 frequency • at AC  operating frequency • at AC-1 maximum • at AC-2 maximum  1 000 1/h  750 1/h	— at 500 V rated value	4 kW
at 400 V rated value at 690 V rated value 2 kW  operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 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 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C  ilimited to 1 s switching at zero current maximum 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 shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switchi	— at 690 V rated value	5 kW
at 400 V rated value at 690 V rated value 2 kW  operating apparent power at AC-6a  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 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 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 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 4 kVA  short-time withstand current in cold operating state up to 40 °C  limited to 1 s switching at zero current maximum limited to 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 shifted 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 olimited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero	operating power for approx. 200000 operating cycles at AC-	
a 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 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 5.9 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 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 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 shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum shifted to 60 s switching at zero current maximum	4	
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 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  • limited to 1 s switching at zero current maximum  • limited to 5 s switching at zero current maximum  • limited to 10 s switching at zero current maximum  • limited to 10 s switching at zero current maximum  • limited to 6 os switching at zero current maximum  • limited to 60 s switching	at 400 V rated value	2 kW
• up to 230 V for current peak value n=20 rated value     • up to 400 V for current peak value n=20 rated value     • up to 500 V for current peak value n=20 rated value     • up to 690 V for current peak value n=20 rated value     • up to 690 V for current peak value n=30 rated value     • up to 230 V for current peak value n=30 rated value     • up to 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 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 1 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 30 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 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	at 690 V rated value	2.5 kW
• up to 400 V for current peak value n=20 rated value     • up to 500 V for current peak value n=20 rated value     • up to 690 V for current peak value n=20 rated value     • up to 690 V for current peak value n=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     • limited to 1 s switching at zero current maximum     • limited to 5 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 30 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limit	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     • 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     • 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	<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	2 kVA
• up to 690 V for current peak value n=20 rated value  operating apparent power at AC-6a      • up to 230 V for current peak value n=30 rated value     • up to 400 V for current peak value n=30 rated value     • up to 500 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • limited to 1 s switching at zero current maximum     • limited to 5 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 30 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • 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     • loo 00 1/h  operating frequency     • at AC     10 000 1/h  operating frequency     • at AC-1 maximum     • at AC-2 maximum     750 1/h	<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	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  • 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 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 curren	<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	4.6 kVA
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 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  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 sharp to 4 kVA  155 A; Use minimum cross-section acc. to AC-1 rated value 66 A; Use minimum cross-section acc. to AC-1 rated value 66 A; Use minimum cross-section acc. to AC-1 rated value 155 A; Use minimum cross-section acc. to AC-1 rated value 155 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value 150 A; Use minimum cross-section acc. to AC-1 rated value	<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	5.9 kVA
<ul> <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>4 kVA</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>st 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>750 1/h</li> </ul>	operating apparent power at AC-6a	
<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 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 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>750 1/h</li> </ul>	• up to 230 V for current peak value n=30 rated value	1.3 kVA
<ul> <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 frequency</li> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>4 kVA</li> <li>5 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>55 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>10 000 1/h</li> </ul>	• up to 400 V for current peak value n=30 rated value	2.4 kVA
short-time withstand current in cold operating state up to 40 °C  • limited to 1 s switching at zero current maximum  • limited to 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  155 A; Use minimum cross-section acc. to AC-1 rated value  66 A; Use minimum cross-section acc. to AC-1 rated value  55 A; Use minimum cross-section acc. to AC-1 rated value  10 000 1/h	• up to 500 V for current peak value n=30 rated value	3.1 kVA
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  10 000 1/h  • at AC-1 maximum  • at AC-2 maximum  10 000 1/h  750 1/h	up to 690 V for current peak value n=30 rated value	4 kVA
• 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  for A; Use minimum cross-section acc. to AC-1 rated value  66 A; Use minimum cross-section acc. to AC-1 rated value  55 A; Use minimum cross-section acc. to AC-1 rated value  10 000 1/h  operating frequency  • at AC-1 maximum  1 000 1/h  • at AC-2 maximum  750 1/h		
<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>mo-load switching frequency</li> <li>at AC</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>1000 1/h</li> <li>1000 1/h</li> <li>1000 1/h</li> </ul>		
<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>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC</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 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>To 400 1/h</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>AC-1 rate</li></ul>	<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	111 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <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>1000 1/h</li> <li>750 1/h</li> </ul>	<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	86 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency       10 000 1/h         operating frequency       at AC-1 maximum       1 000 1/h         o at AC-2 maximum       750 1/h	<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	66 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>750 1/h</li> </ul>	<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	55 A; Use minimum cross-section acc. to AC-1 rated value
● at AC 10 000 1/h  operating frequency  ● at AC-1 maximum 1 000 1/h  ● at AC-2 maximum 750 1/h	no-load switching frequency	
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>1 000 1/h</li> <li>750 1/h</li> </ul>	• at AC	10 000 1/h
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>1 000 1/h</li> <li>750 1/h</li> </ul>	operating frequency	
• at AC-2 maximum 750 1/h		1 000 1/h
▼ at 70-5 illa\lilliiii	at AC-3 maximum	750 1/h
• at AC-3e maximum 750 1/h		
• at AC-4 maximum 250 1/h		
Control circuit/ Control		200 m
		۸۲
type of voltage of the control supply voltage AC		AU .
control supply voltage at AC		220 1/
• at 50 Hz rated value 220 V		
• at 60 Hz rated value 240 V		240 V
operating range factor control supply voltage rated value of magnet coil at AC	operating range factor control supply voltage rated value of	

* at 50 Hz		
apparent plack-up power of magnet coil at AC	● at 50 Hz	0.8 1.1
# of 80 Hz	• at 60 Hz	0.8 1.1
and 60 Hz	apparent pick-up power of magnet coil at AC	
Mainthe power factor with closing power of the coil   0.81   0.	● at 50 Hz	26.4 VA
* #1 50 Hz	● at 60 Hz	26.4 VA
# #150 Hz  #1 44 VA  #4	inductive power factor with closing power of the coil	
apparent holding power of magnet coil at AC	● at 50 Hz	0.81
* a160 Hz	• at 60 Hz	0.81
miductive power factor with the holding power of the coil	apparent holding power of magnet coil at AC	
Inductive power factor with the holding power of the coll	• at 50 Hz	4.4 VA
• at 80 Hz	• at 60 Hz	4.4 VA
• al 60 Hz	inductive power factor with the holding power of the coil	
A I AC   9 35 ms     • at I AC   9 35 ms     • at I AC   4 15 ms     • at I AC   5 15 ms     • at I AC   15 ms     •	• at 50 Hz	0.24
• at AC opening delay • at IAC arcling time control version of the switch operating mechanism  Control version of the switch operating mechanism  Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact contact  Operational current at AC-12 maximum  operational current at AC-18 maximum  operational current at AC-18 maximum  operational current at AC-19 maximum  10 A  at 230 V rated value  10 A  at 800 V rated value  11 A  operational current at DC-12  • at 800 V rated value  12 A  at 80 V rated value  13 A  at 80 V rated value  14 A  at 100 V rated value  15 A  at 80 V rated value  16 A  at 100 V rated value  17 A  at 800 V rated value  18 A  at 125 V rated value  19 A  at 120 V rated value  10 A  at 125 V rated value  10 A  at 120 V rated value  10 A  at 120 V rated value  10 A  at 110 V rated value  20 A  at 110 V rated value  10 A  at 120 V rated value  21 A  at 120 V rated value  22 A  at 110 V rated value  10 A  at 120 V rated value  24 A  at 110 V rated value  25 A  at 110 V rated value  26 A  at 110 V rated value  27 A  at 110 V rated value  28 A  at 110 V rated value  29 A  at 110 V rated value  20 A  at 110 V rated value  20 A  at 110 V rated value  21 A  at 110 V rated value  22 A  at 110 V rated value  25 A  at 110 V rated value  26 A  at 20 V rated value  27 A  at 600 V rated value  28 A  at 110 V rated value  29 A  at 200 V rated value  20 A  at 200 V rated value  30 A  at 200 V rated value  40 A  50 A  5	● at 60 Hz	0.24
a rank	closing delay	
arcing time	• at AC	9 35 ms
arcing time	opening delay	
Control version of the switch operating mechanism   Standard A1 - A2	• at AC	4 15 ms
Auxiliary circuit	arcing time	10 15 ms
number of NC contacts for auxiliary contacts instantaneous	control version of the switch operating mechanism	Standard A1 - A2
Contact   Cont	Auxiliary circuit	
operational current at AC-12 maximum         10 A           operational current at AC-15         1 30 V rated value           a at 300 V rated value         3 A           at 500 V rated value         2 A           at 500 V rated value         1 A           operational current at DC-12         10 A           at 24 V rated value         6 A           at 40 V rated value         6 A           at 10 V rated value         3 A           at 10 V rated value         3 A           at 110 V rated value         1 A           at 220 V rated value         1 A           at 220 V rated value         1 A           at 24 V rated value         1 A           at 24 V rated value         10 A           at 48 V rated value         2 A           at 24 V rated value         2 A           at 24 V rated value         2 A           at 110 V rated value         2 A           at 110 V rated value         2 A           at 125 V rated value         0.9 A           at 200 V rated value         0.1 A           at 600 V rated value         0.3 A           at 600 V rated value         0.4 A           at 600 V rated value         0.4 A           at 600 V rated value		1
Accordance   Acc	contact	
	<u> </u>	10 A
	•	
• at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 100 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 600 V rated value • at 48 V rated value • at 48 V rated value • at 400 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 126 V rated value • at 600 V rated value • for 3-phase AC motor  — at 110 V rated value • for 3-phase AC motor  — at 200 V rated value • for 3-phase AC motor  — at 575660 V rated value • for 3-phase AC motor  — at 575660 V rated value • for 3-phase AC motor  — at 575660 V rated value • for 3-phase AC motor  — at 6000 V rated value • for 3-phase AC motor  — at 575660 V rated value • for 3-phase AC motor  — at 575660 V rated value • for 3-phase AC motor  — at 575660 V rated value • for 3-phase AC motor  — at 575660 V rated value • for 3-phase AC motor  — at 575660 V rated value • for 3-phase AC motor  — at 575660 V rated value •		
10 A   12 A	at 500 V rated value	
		1 A
	operational current at DC-12	
at 160 V rated value     at 110 V rated value     at 125 V rated value     at 125 V rated value     at 220 V rated value     at 600 V rated value     at 60 V rated value     at 48 V rated value     at 60 V rated value     at 60 V rated value     at 110 V rated value     at 110 V rated value     at 125 V rated value     at 125 V rated value     at 125 V rated value     at 126 V rated value     at 127 V rated value     at 128 V rated value     at 600 V rated value     at 7.6 A     at 600 V rated value     at 7.6 A     at 600 V rated value     at 7.6 A     at 600 V rated value     at 600 V rated value     at 600 V rated value     at 7.6 A     at 600 V rated value     at 600 V rated val	at 24 V rated value	
• at 110 V rated value       3 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 125 V rated value       0.3 A         • at 220 V rated value       0.1 A         • at 600 V rated value       0.1 A         • at 600 V rated value       0.1 A         • at 480 V rated value       7.6 A         • at 480 V rated value       9 A         • yielded mechanical performance [hp]       9 A         • for single-phase AC motor       0.33 hp         • at 220 V rated value       1 hp         • for 3-phase AC motor       2 hp         • at 220/230 V rated value       3 hp         • at 460/480 V rated value       5 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	at 48 V rated value	
	at 60 V rated value	
	<ul> <li>at 110 V rated value</li> </ul>	3 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 11 A • at 125 V rated value 0.9 A • at 220 V rated value 0.3 A • at 220 V rated value 0.1 A contact reliability of auxiliary contacts 1 rately 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 9 A  vielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 0.33 hp — at 230 V rated value 1 hp • for 3-phase AC motor — at 200/208 V rated value 2 hp — at 220/203 V rated value 2 hp — at 460/480 V rated value 3 hp — at 460/480 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	• at 125 V rated value	2 A
operational current at DC-13		1 A
	at 600 V rated value	0.15 A
<ul> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>1 faulty switching per 100 million (17 V, 1 mA)</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>for single-phase AC motor</li> <li>at 110 V rated value</li> <li>for single-phase AC motor</li> <li>at 110 V rated value</li> <li>for 3-phase AC motor</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 575/600 V rated value</li> <li>5 hp</li> <li>at 600 V Q600</li> </ul>	operational current at DC-13	
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 480 V rated value</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> <li>at 230 V rated value</li> <li>at 230 V rated value</li> <li>at 220/230 V rated value</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 200/408 V rated value</li> <li>at 460/480 V rated value</li> <li>5 hp</li> <li>at 575/600 V rated value</li> <li>7.5 hp</li> <li>contact rating of auxiliary contacts according to UL</li> </ul>	at 24 V rated value	10 A
at 110 V rated value     at 125 V rated value     at 220 V rated value     at 220 V rated value     at 600 V rated value     at 480 V rated value     at 600 V rated value     at 101/120 V rated value     at 110/120 V rated value     at 110/120 V rated value     at 230 V rated value     at 200 V rated value     at 200 V rated value     at 200/208 V rated value     at 200/208 V rated value     at 200/208 V rated value     at 460/480 V rated value     at 460/480 V rated value     at 575/600 V rated value		
<ul> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>0.1 A</li> <li>contact reliability of auxiliary contacts</li> <li>1 faulty switching per 100 million (17 V, 1 mA)</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>9 A</li> </ul> </li> <li>yielded mechanical performance [hp] <ul> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>1 hp</li> </ul> </li> <li>for 3-phase AC motor</li> <li>at 230 V rated value</li> <li>1 hp</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>3 hp</li> <li>at 200/230 V rated value</li> <li>3 hp</li> <li>at 460/480 V rated value</li> <li>5 hp</li> <li>at 575/600 V rated value</li> <li>7.5 hp</li> </ul> <li>contact rating of auxiliary contacts according to UL</li>		
<ul> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>0.1 A</li> </ul> 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           - at 230 V rated value         1 hp           • for 3-phase AC motor         1 hp           - at 200/208 V rated value         2 hp           - at 220/230 V rated value         3 hp           - at 460/480 V rated value         5 hp           - at 575/600 V rated value         7.5 hp           contact rating of auxiliary contacts according to UL	• at 110 V rated value	1 A
at 600 V rated value  contact reliability of auxiliary contacts  1 faulty switching per 100 million (17 V, 1 mA)  UL/CSA ratings  full-load current (FLA) for 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  1 hp  for 3-phase AC motor  - at 230 V rated value  1 hp  for 3-phase AC motor  - at 200/208 V rated value  2 hp  - at 220/230 V rated value  3 hp  - at 460/480 V rated value  - at 460/480 V rated value  3 hp  - at 575/600 V rated value  7.5 hp  contact rating of auxiliary contacts according to UL  A600 / Q600		0.9 A
contact reliability of auxiliary contacts  1 faulty switching per 100 million (17 V, 1 mA)  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  9 A  yielded mechanical performance [hp]  • for single-phase AC motor  - at 110/120 V rated value  1 hp  • for 3-phase AC motor  - at 230 V rated value  1 hp  • for 3-phase AC motor  - at 200/208 V rated value  2 hp  - at 220/230 V rated value  3 hp  - at 460/480 V rated value  5 hp  - at 575/600 V rated value  7.5 hp  contact rating of auxiliary contacts according to UL  A600 / Q600	• at 220 V rated value	0.3 A
### Fig. 2	at 600 V rated value	0.1 A
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  9 A  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value  0.33 hp — at 230 V rated value  1 hp  • for 3-phase AC motor  — at 200/208 V rated value  2 hp — at 220/230 V rated value  3 hp — at 460/480 V rated value  — at 575/600 V rated value  7.5 hp  contact rating of auxiliary contacts according to UL  A600 / Q600	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
<ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>9 A</li> </ul> yielded mechanical performance [hp] <ul> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>3 hp</li> <li>at 460/480 V rated value</li> <li>5 hp</li> <li>at 575/600 V rated value</li> <li>7.5 hp</li> </ul> contact rating of auxiliary contacts according to UL <ul> <li>A600 / Q600</li> </ul>	UL/CSA ratings	
at 600 V rated value  yielded mechanical performance [hp]  of or single-phase AC motor  - at 110/120 V rated value  - at 230 V rated value  of or 3-phase AC motor  - at 200/208 V rated value  2 hp  - at 220/230 V rated value  3 hp  - at 460/480 V rated value  - at 575/600 V rated value  contact rating of auxiliary contacts according to UL  9 A  9 A  9 A  9 A  9 A  1 hp  0.33 hp  1 hp  1 hp  1 hp  2 hp  3 hp  5 hp  7.5 hp	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value 0.33 hp  — at 230 V rated value 1 hp  • for 3-phase AC motor  — at 200/208 V rated value 2 hp  — at 220/230 V rated value 3 hp  — at 460/480 V rated value 5 hp  — at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / Q600	• at 480 V rated value	7.6 A
<ul> <li>for single-phase AC motor  — at 110/120 V rated value</li></ul>	at 600 V rated value	9 A
- at 110/120 V rated value 0.33 hp - at 230 V rated value 1 hp  ● for 3-phase AC motor - at 200/208 V rated value 2 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 5 hp - at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / Q600	yielded mechanical performance [hp]	
- at 230 V rated value 1 hp  • for 3-phase AC motor  - at 200/208 V rated value 2 hp  - at 220/230 V rated value 3 hp  - at 460/480 V rated value 5 hp  - at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / Q600	<ul> <li>for single-phase AC motor</li> </ul>	
● for 3-phase AC motor  — at 200/208 V rated value 2 hp  — at 220/230 V rated value 3 hp  — at 460/480 V rated value 5 hp  — at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / Q600	— at 110/120 V rated value	0.33 hp
- at 200/208 V rated value 2 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 5 hp - at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / Q600	— at 230 V rated value	1 hp
— at 220/230 V rated value       3 hp         — at 460/480 V rated value       5 hp         — at 575/600 V rated value       7.5 hp         contact rating of auxiliary contacts according to UL       A600 / Q600	• for 3-phase AC motor	
- 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	— at 200/208 V rated value	2 hp
— at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / Q600	— at 220/230 V rated value	3 hp
contact rating of auxiliary contacts according to UL A600 / Q600	— at 460/480 V rated value	5 hp
· · · · · · · · · · · · · · · · · · ·	— at 575/600 V rated value	7.5 hp
Short-circuit protection	contact rating of auxiliary contacts according to UL	A600 / Q600
	Short-circuit protection	

design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
<ul> <li>— with type of coordination 1 required</li> </ul>	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)
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
• side-by-side mounting	Yes
height	58 mm
width	45 mm
depth	73 mm
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
for grounded parts	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	Ring cable lug connection
<ul> <li>for auxiliary and control circuit</li> </ul>	ring terminal lug connection
at contactor for auxiliary contacts	Ring cable lug connection
of magnet coil	Ring cable lug connection
Safety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
with low demand rate according to SN 31920	40 %
with high demand rate according to SN 31920	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP00
suitability for use	
safety-related switching OFF	Yes
Certificates/ approvals	
General Product Approval	

#### General Product Approva





Confirmation



KC



EMC	Functional Safety/Safety of Ma- chinery	Declaration of Conformity	Test Certificates
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#### Type Examination Cer**tificate**





Type Test Certificates/Test Report

**Special Test Certific**ate

## Marine / Shipping













Marine / Shipping

Railway

**Environment** 



Confirmation



Vibration and Shock

**Environmental Con**firmations

### Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2016-4AP62

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-4AP62

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-4AP6

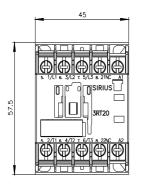
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

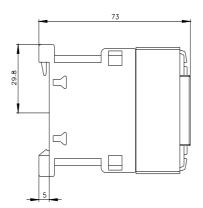
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2016-4AP62&lang=en

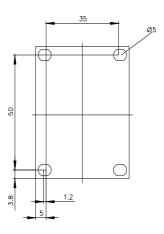
Characteristic: Tripping characteristics, I2t, Let-through current

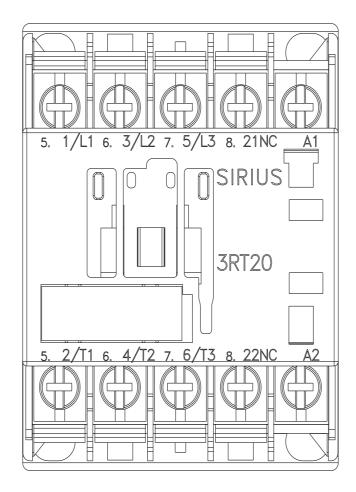
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-4AP62/char

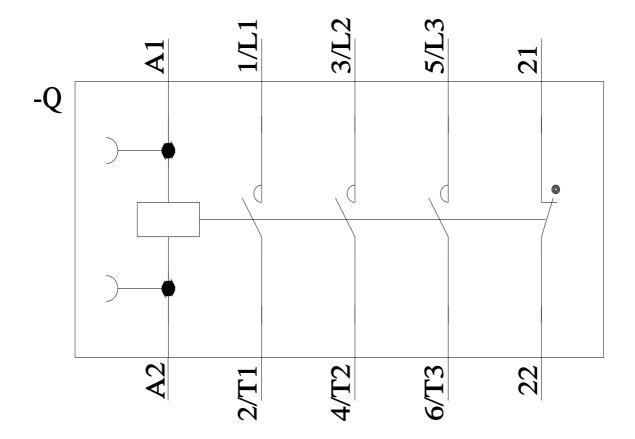
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-4AP62&objecttype=14&gridview=view1











last modified: 2/10/2023 🖸