## **SIEMENS**

## Data sheet

## 3RT2045-3AC20

power contactor, AC-3 80 A, 37 kW / 400 V 1 NO + 1 NC, 24 V AC 50/60 Hz 3-pole, 3 NO, Size S3 Spring-type terminal



product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S3
product extension	
<ul> <li>function module for communication</li> </ul>	No
<ul> <li>auxiliary switch</li> </ul>	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	15.9 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	5.3 W
power loss [W] for rated value of the current without load current share typical	25 W
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	8 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>between coil and main contacts acc. to EN 60947-1</li> </ul>	690 V

protection class IP	
• on the front	IP20
• of the terminal	IP00
shock resistance at rectangular impulse	
• at AC	6.7 g / 5 ms, 4.0 g / 10 ms
shock resistance with sine pulse	
• at AC	10.6 g / 5 ms, 6.3 g / 10 ms
mechanical service life (switching cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronics- compatible 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 acc. to DIN EN 81346-2	Q
Ambient conditions	
<ul> <li>installation altitude at height above sea level</li> </ul>	2 000 m
maximum	
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
• during storage	-55 +80 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	1 000 V
operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	125 A
● at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	125 A
— up to 690 V at ambient temperature 60 °C rated value	105 A
— up to 1000 V at ambient temperature 40 °C rated value	60 A
— up to 1000 V at ambient temperature 60 °C rated value	50 A
• at AC-3	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
• at AC-4 at 400 V rated value	66 A

• at AC-5a up to 690 V rated value	110 A
• at AC-5b up to 400 V rated value	80 A
● at AC-6a	
<ul> <li>— up to 230 V for current peak value n=20 rated value</li> </ul>	80 A
— up to 400 V for current peak value n=20 rated value	80 A
— up to 500 V for current peak value n=20 rated value	80 A
— up to 690 V for current peak value n=20 rated value	58 A
● at AC-6a	
— up to 230 V for current peak value n=30 rated value	54 A
— up to 400 V for current peak value n=30 rated value	54 A
— up to 500 V for current peak value n=30 rated value	54 A
— up to 690 V for current peak value n=30 rated value	54 A
minimum cross-section in main circuit	
<ul> <li>at maximum AC-1 rated value</li> </ul>	50 mm <sup>2</sup>
operating current for approx. 200000 operating	
cycles at AC-4	
	34 A
cycles at AC-4	34 A 24 A
• at 400 V rated value	
<ul><li>cycles at AC-4</li><li>at 400 V rated value</li><li>at 690 V rated value</li></ul>	
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current	
<ul> <li>cycles at AC-4</li> <li>at 400 V rated value</li> <li>at 690 V rated value</li> <li>operating current</li> <li>at 1 current path at DC-1</li> </ul>	24 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value	24 A 100 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value	24 A 100 A 9 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value	24 A 100 A 9 A 2 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value	24 A 100 A 9 A 2 A 0.6 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value	24 A 100 A 9 A 2 A 0.6 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 24 V rated value — at 20 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1	24 A 100 A 9 A 2 A 0.6 A 0.4 A
<ul> <li>cycles at AC-4 <ul> <li>at 400 V rated value</li> <li>at 690 V rated value</li> </ul> </li> <li>operating current <ul> <li>at 1 current path at DC-1</li> <li>at 24 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>at 440 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>at 24 V rated value</li> </ul> </li> </ul>	24 A 100 A 9 A 2 A 0.6 A 0.4 A 100 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value = at 110 V rated value	24 A 100 A 9 A 2 A 0.6 A 0.4 A 100 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value = at 110 V rated value — at 24 V rated value = at 110 V rated value — at 220 V rated value	24 A 100 A 9 A 2 A 0.6 A 0.4 A 100 A 100 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 440 V rated value	24 A 100 A 9 A 2 A 0.6 A 0.4 A 100 A 100 A 100 A 10 A
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating current • at 1 current path at DC-1 — at 24 V rated value — at 210 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 24 V rated value — at 220 V rated value — at 240 V rated value — at 240 V rated value — at 200 V rated value	24 A 100 A 9 A 2 A 0.6 A 0.4 A 100 A 100 A 100 A 10 A
<ul> <li>cycles at AC-4 <ul> <li>at 400 V rated value</li> <li>at 690 V rated value</li> </ul> </li> <li>operating current <ul> <li>at 1 current path at DC-1</li> <li>at 24 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>at 440 V rated value</li> <li>at 600 V rated value</li> </ul> </li> <li>with 2 current paths in series at DC-1 <ul> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 600 V rated value</li> <li>at 210 V rated value</li> <li>at 24 V rated value</li> <li>at 20 V rated value</li> </ul> </li> </ul>	24 A 100 A 9 A 2 A 0.6 A 0.4 A 100 A 100 A 10 A 10 A 1.8 A 1 A

operating current            • at 1 current path at DC-3 at DC-5         -           - at 24 V rated value         40 A           - at 220 V rated value         1A           - at 220 V rated value         0.05 A           - at 220 V rated value         0.06 A           - at 600 V rated value         0.00 A           - at 24 V rated value         0.00 A           - at 24 V rated value         000 A           - at 24 V rated value         000 A           - at 440 V rated value         0.016 A           - at 440 V rated value         0.42 A           - at 440 V rated value         0.42 A           - at 440 V rated value         0.42 A           - at 440 V rated value         0.46 A           - at 440 V rated value         0.8 A           - at 440 V rated value         0.8 A           - at 440 V rated value         37 KW           • at 400 V rated value         37 KW           - at 400 V rated value         37 KW           - at 400 V rated value         100 A	— at 440 V rated value	4.5 A
eat 1 current path at DC-3 at DC-5 eat 24 V rated value 40 A 25 A at 24 V rated value 25 A at 24 V rated value 0.06 A - at 240 V rated value 0.06 A - at 240 V rated value 0.06 A - at 24 V rated value 0.06 A - at 24 V rated value 0.07 A - at 24 V rated value 0.08 A - at 24 V rated value 0.08 A - at 220 V rated value 0.07 A - at 220 V rated value 0.07 A - at 220 V rated value 0.08 A - at 220 V rated value 0.07 A - at 220 V rated value 0.07 A - at 220 V rated value 0.08 A - at 230 V rated value 0.08 A - at 230 V rated value 0.38 A - at 230 V rated value 0.38 A - at 230 V rated value 210 V rated value 22 KW - at 230 V rated value 22 KW - at 230 V rated value 22 KW - at 230 V rated value 23 KW - at 230 V rated value 24 KW - at 630 V rated value 21 KW - at 630 V rated value 21 KW - at 630 V rated value 21 KW - at 630 V rated value <	— at 600 V rated value	2.6 A
	operating current	
	<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
- at 220 V rated value         1 A           - at 440 V rated value         0.15 A           - at 600 V rated value         0.06 A           - at 600 V rated value         100 A           - at 24 V rated value         100 A           - at 220 V rated value         100 A           - at 220 V rated value         7 A           - at 440 V rated value         0.42 A           - at 440 V rated value         0.16 A           - at 440 V rated value         0.06 A           - at 220 V rated value         0.16 A           - at 440 V rated value         0.16 A           - at 220 V rated value         0.8 A           - at 440 V rated value         0.8 A           - at 440 V rated value         0.8 A           - at 220 V rated value         35 A           Operating power         37 kW           - at 230 V rated value         22 kW           - at 230 V rated value         22 kW           - at 400 V rated value         37 kW           - at 630 V rated value         25 kW           - at 630 V rated value         21 kW           - at 630 V rated value         21 kW           - at 600 V rated value         5 kW           - at 600 V rated value         5 kW	— at 24 V rated value	40 A
Label Add V rated value0.15 Å- at 440 V rated value0.06 Å• with 2 current paths in series at DC-3 at DC-5 at 24 V rated value100 Å- at 24 V rated value100 Å- at 24 V rated value0.42 Å- at 440 V rated value0.42 Å- at 440 V rated value0.16 Å- at 440 V rated value0.16 Å- at 20 V rated value0.16 Å- at 20 V rated value0.08 Å- at 20 V rated value0.08 Å- at 21 V rated value0.08 Å- at 440 V rated value0.08 Å- at 440 V rated value0.8 Å- at 440 V rated value0.35 Å- at 200 V rated value0.35 Å- at 230 V rated value22 kW- at 400 V rated value37 kW- at 230 V rated value22 kW- at 600 V rated value22 kW- at 600 V rated value37 kW- at 600 V rated value22 kW- at 600 V rated value21 kW- at 600 V rated value55 kW- at 600 V rated value31 kVA- at 600 V rated value56 kVA- at 600 V for current peak value n=20 rated value69 kVA- at 600 V for current peak value n=20 rated value69 kVA- at 600 V for current peak value n=20 rated value69 kVA- at 600 V for current peak value n=20 rated value69 kVA<	— at 110 V rated value	2.5 A
Interface0.06 Å• with 2 current paths in series at DC-3 at DC-5100 Å- at 24 V rated value100 Å- at 100 V rated value100 Å- at 220 V rated value0.42 Å- at 440 V rated value0.42 Å- at 600 V rated value0.16 Å• with 3 current paths in series at DC-3 at DC-5100 Å- at 220 V rated value100 Å- at 24 V rated value100 Å- at 20 V rated value0.8 Å- at 600 V rated value0.8 Å- at 600 V rated value22 kW- at 600 V rated value37 kW• at AC-2 at 400 V rated value37 kW• at 230 V rated value22 kW- at 230 V rated value55 kW- at 690 V rated value55 kW- at 690 V rated value21.8 kW• at 690 V rated value21.8 kW• at 690 V rated value31 kV-Å• up to 230 V for current peak value n=20 rated value55 kV/Å• up to 500 V for current peak value n=20 rated value69 kV-Å• up to 500 V for current peak value n=20 rated value69 kV-Å	— at 220 V rated value	1 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 440 V rated value</li> <li>0.42 A</li> <li>at 400 V rated value</li> <li>0.16 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>100 A</li> <li>at 24 V rated value</li> <li>0.8 A</li> <li>at 400 V rated value</li> <li>22 kW</li> <li>at AC-2 at 400 V rated value</li> <li>37 kW</li> <li>at AC-3</li> <li>at 300 V rated value</li> <li>37 kW</li> <li>at 300 V rated value</li> <li>37 kW</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 300 V rated value</li> <li>37 kW</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 300 V rated value</li> <li>37 kW</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 300 V rated value</li> <li>37 kW</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 690 V rated value</li> <li>48 kV</li> <li>at 400 V rated value</li> <li>41 kVA</li> <li>41 to 00 V rated value</li> <li>41 kO-46</li> <li>41 kVA</li> <li>41 to 00 V for current peak value n=20 rated value</li> <li>40 kVA</li> <li>41 kVA</li></ul>	— at 440 V rated value	0.15 A
- at 24 V rated value       100 A         - at 110 V rated value       100 A         - at 220 V rated value       7 A         - at 440 V rated value       0.42 A         - at 600 V rated value       0.16 A         • with 3 current paths in series at DC-3 at DC-3       100 A         - at 24 V rated value       100 A         - at 24 V rated value       100 A         - at 220 V rated value       35 A         - at 400 V rated value       0.8 A         - at 600 V rated value       0.35 A         cperating power       22 kW         - at 400 V rated value       22 kW         - at 400 V rated value       37 kW         - at 400 V rated value       55 kW         - at 400 V rated value       55 kW         - at 400 V rated value       21 8 kW         - at 400 V rated value       11 kV-A         - at 690 V for current peak value n=20 rated       51 kV-A         - up to 500 V for current peak value n=20 rated       69 kV-A         - up to 500 V for current peak value n=20 rated       69 kV-A	— at 600 V rated value	0.06 A
<ul> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 440 V rated value</li> <li>at 440 V rated value</li> <li>at 600 V rated value</li> <li>0.16 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 220 V rated value</li> <li>100 A</li> <li>at 110 V rated value</li> <li>100 A</li> <li>at 110 V rated value</li> <li>100 A</li> <li>at 220 V rated value</li> <li>0.16 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 220 V rated value</li> <li>35 A</li> <li>at 440 V rated value</li> <li>0.8 A</li> <li>at 440 V rated value</li> <li>0.8 A</li> <li>at AC-2 at 400 V rated value</li> <li>35 A</li> <li>at AC-3</li> <li>at AC-3</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>37 kW</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 690 V rated value</li> <li>37 kW</li> <li>at 690 V rated value</li> <li>at AC-4</li> <li>at 400 V rated value</li> <li>at AC-4</li> <li>at 400 V rated value</li> <li>at AC-4</li> <li>at 400 V rated value</li> <li>by to 500 V for current peak value n=20 rated</li> <li>y up to 500 V for current peak value n=20 rated</li> <li>400 V rated value n=20 rated</li> <li>400 V for current peak value n=20 rated</li> <li>400 V for current</li></ul>	<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
at 220 V rated value7 A- at 220 V rated value0.42 A- at 400 V rated value0.16 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value100 A- at 110 V rated value100 A- at 220 V rated value35 A- at 400 V rated value0.8 A- at 600 V rated value0.8 A- at 230 V rated value0.8 A- at 230 V rated value35 A- at 400 V rated value37 kW- at 400 V rated value22 kW- at 400 V rated value37 kW- at 600 V rated value55 kW- at 600 V rated value21.8 kW- at 600 V rated value21.8 kW- at 600 V rated value n=20 rated55 kV·A- up to 500 V for current peak value n=20 rated55 kV·A- up to 500 V for current peak value n=20 rated69 kV·A- up to 500 V for current peak value n=20 rated69 kV·A	— at 24 V rated value	100 A
<ul> <li>at 440 V rated value</li> <li>at 440 V rated value</li> <li>at 600 V rated value</li> <li>0.16 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>100 A</li> <li>at 110 V rated value</li> <li>100 A</li> <li>at 220 V rated value</li> <li>0.8 A</li> <li>at 600 V rated value</li> <li>0.8 A</li> <li>at 600 V rated value</li> <li>0.35 A</li> <li>operating power</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 600 V rated value</li> <li>37 kW</li> <li>at AC-2 at 400 V rated value</li> <li>37 kW</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>37 kW</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 600 V rated value</li> <li>37 kW</li> <li>at 400 V rated value</li> <li>37 kW</li> <li>at 400 V rated value</li> <li>55 kW</li> <li>operating power for approx. 200000 operating cycles at AC-4</li> <li>at 400 V rated value</li> <li>at 690 V rated value</li> <li>at 690 V rated value</li> <li>at 690 V rated value</li> <li>by to 500 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 500 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 500 V for current peak value n=20 rated value</li> <li>up to 500 V for current peak value n=20 rated 55 kV/A</li> <li>up to 500 V for current peak value n=20 rated 56 kV/A</li> </ul>	— at 110 V rated value	100 A
<ul> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 10 V rated value</li> <li>at 10 V rated value</li> <li>at 20 V rated value</li> <li>at 40 V rated value</li> <li>at 40 V rated value</li> <li>at 600 V rated value</li> <li>bit 600 V rated value</li> <li>cit 600 V rated value</li> <li>cit 600 V rated value</li> <li>bit 600 V rated value</li> <li>cit 600 V rated value n=20 rated value</li> <li>cit 600 V for current peak value n=20 rated value</li> <li>cit 600 V for current peak value n=20 rated value</li> <li>cit 600 V for current peak value n=20 rated value</li> <li>cit 600 V for current peak value n=20 rated value</li> <li>cit 600 V for current peak value n=20 rated val</li></ul>	— at 220 V rated value	7 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 24 V rated value</li> <li>at 110 V rated value</li> <li>at 110 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>at 440 V rated value</li> <li>at 440 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-3</li> <li>at 220 V rated value</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 400 V rated value</li> <li>at 600 V rated value</li> <li>bt NW</li> <li>at 600 V rated value</li> <li>bt NW</li> <li>at 600 V rated value</li> <li>bt NW</li> </ul> </li> <li>at 600 V rated value</li> <li>bt NW</li> <li>bt 00 V rated value</li> <li>coperating power for approx. 200000 operating cycles at AC-4</li> <li>at 400 V rated value</li> <li>bt NW</li> </ul> <li>at 600 V rated value</li> <li>bt 00 V rated value</li> <li>bt 00 V rated value</li> <li>bt 00 V rated value</li> <li>coperating apparent output at AC-6a</li> <li>up to 230 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>bt NVA</li> <li>value</li> <li>up to 500 V for current peak value n=20 rated value</li> <li>cop to 400 V for current peak value n=20 rated value</li> <li>by NVA</li>	— at 440 V rated value	0.42 A
- at 24 V rated value       100 A         - at 110 V rated value       100 A         - at 220 V rated value       35 A         - at 440 V rated value       0.8 A         - at 600 V rated value       0.35 A         operating power       37 kW         - at 230 V rated value       22 kW         - at 230 V rated value       22 kW         - at 400 V rated value       37 kW         - at 230 V rated value       22 kW         - at 400 V rated value       37 kW         - at 690 V rated value       55 kW         - at 690 V rated value       55 kW         operating power for approx. 200000 operating cycles       21.8 kW         operating apparent output at AC-6a       31 kV-A         value       55 kV-A         - up to 400 V for current peak value n=20 rated       55 kV-A         value       55 kV-A         - up to 500 V for current peak value n=20 rated       69 kV-A         value       69 kV-A	— at 600 V rated value	0.16 A
<ul> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 420 V rated value</li> <li>at 440 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>at AC-2 at 400 V rated value</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 600 V rated value</li> <li>bit AC-3</li> <li>at 600 V rated value</li> <li>bit AC-3</li> <li>at 600 V rated value</li> <li>bit AC-3</li> <li>bit AC-4</li> <li>bit AC-4<td><ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul></td><td></td></li></ul>	<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
<ul> <li>at 220 V rated value</li> <li>at 420 V rated value</li> <li>at 440 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 400 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>by 0 rated value</li> <li>c at 600 V rated value</li> <li>by 0 rated value</li> <li>c at 600 V rated value = 20 rated</li> <li>c w p to 500 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20 rated</li> <li>c w p to 600 V for current peak value = 20</li></ul>	— at 24 V rated value	100 A
- at 440 V rated value0.8 A- at 600 V rated value0.35 Aoperating power37 kW• at AC-2 at 400 V rated value37 kW• at AC-322 kW- at 230 V rated value22 kW- at 400 V rated value37 kW- at 400 V rated value37 kW- at 500 V rated value55 kWoperating power for approx. 200000 operating cyclesat AC-455 kW• at 400 V rated value17.9 kW• at 690 V rated value21.8 kWoperating apparent output at AC-6a• up to 230 V for current peak value n=20 rated value31 kV-A• up to 500 V for current peak value n=20 rated value69 kV-A• up to 690 V for current peak value n=20 rated value69 kV-A	— at 110 V rated value	100 A
at 600 V rated value0.35 Aoperating power7• at AC-2 at 400 V rated value37 kW• at AC-322 kW- at 230 V rated value37 kW- at 400 V rated value37 kW- at 500 V rated value55 kWoperating power for approx. 200000 operating cycles55 kWat AC-417.9 kW• at 400 V rated value21.8 kWoperating apparent output at AC-6a31 kV-A• up to 230 V for current peak value n=20 rated value55 kV-A• up to 500 V for current peak value n=20 rated value69 kV-A• up to 690 V for current peak value n=20 rated value69 kV-A• up to 690 V for current peak value n=20 rated value69 kV-A	— at 220 V rated value	35 A
operating power• at AC-2 at 400 V rated value37 kW• at AC-322 kW- at 230 V rated value22 kW- at 400 V rated value37 kW- at 500 V rated value45 kW- at 690 V rated value55 kWoperating power for approx. 200000 operating cycles at AC-417.9 kW• at 400 V rated value17.9 kW• at 690 V rated value21.8 kWoperating apparent output at AC-6a31 kV-A• up to 230 V for current peak value n=20 rated value55 kV-A• up to 500 V for current peak value n=20 rated value69 kV-A• up to 690 V for current peak value n=20 rated value69 kV-A	— at 440 V rated value	0.8 A
• at AC-2 at 400 V rated value37 kW• at AC-322 kW- at 230 V rated value22 kW- at 400 V rated value37 kW- at 500 V rated value45 kW- at 690 V rated value55 kWoperating power for approx. 200000 operating cycles at AC-417.9 kW• at 690 V rated value21.8 kWoperating apparent output at AC-6a value31 kV-A• up to 230 V for current peak value n=20 rated value55 kV-A• up to 500 V for current peak value n=20 rated value69 kV-A• up to 500 V for current peak value n=20 rated value69 kV-A	— at 600 V rated value	0.35 A
<ul> <li>at AC-3</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>55 kW</li> </ul> operating power for approx. 200000 operating cycles at AC-4 at AC-4 at 400 V rated value 17.9 kW at 400 V rated value 21.8 kW operating apparent output 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	operating power	
- at 230 V rated value22 kW- at 400 V rated value37 kW- at 500 V rated value45 kW- at 690 V rated value55 kWoperating power for approx. 20000 operating cycles at AC-47.9 kW• at 400 V rated value17.9 kW• at 690 V rated value21.8 kWoperating apparent output at AC-6a value31 kV·A• up to 230 V for current peak value n=20 rated value55 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A	• at AC-2 at 400 V rated value	37 kW
<ul> <li>at 400 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 600 V rated value</li> <li>bt W</li> <li>at 600 V rated value</li> <li>55 kW</li> <li>operating power for approx. 200000 operating cycles at AC-4</li> <li>at 400 V rated value</li> <li>17.9 kW</li> <li>at 690 V rated value</li> <li>21.8 kW</li> <li>operating apparent output at AC-6a</li> <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>0per to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> <li>bup to 500 V for current peak value n=20 rated value</li> </ul>	• at AC-3	
at 500 V rated value45 kW at 690 V rated value55 kWoperating power for approx. 200000 operating cycles at AC-417.9 kW• at 400 V rated value17.9 kW• at 690 V rated value21.8 kWoperating apparent output at AC-6a90 kV·A• up to 230 V for current peak value n=20 rated value55 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A	— at 230 V rated value	22 kW
at 690 V rated value55 kWoperating power for approx. 200000 operating cycless at AC-47• at 400 V rated value17.9 kW• at 690 V rated value21.8 kWoperating apparent output at AC-6a31 kV·A• up to 230 V for current peak value n=20 rated value55 kV·A• up to 400 V for current peak value n=20 rated value69 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A• up to 690 V for current peak value n=20 rated value69 kV·A	— at 400 V rated value	37 kW
operating power for approx. 200000 operating cycles at AC-4• at 400 V rated value17.9 kW• at 690 V rated value21.8 kWoperating apparent output at AC-6a• up to 230 V for current peak value n=20 rated value31 kV·A• up to 400 V for current peak value n=20 rated value55 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A• up to 690 V for current peak value n=20 rated value69 kV·A	— at 500 V rated value	45 kW
at AC-4Image: state of the state	— at 690 V rated value	55 kW
• at 400 V rated value17.9 kW• at 690 V rated value21.8 kWoperating apparent output at AC-6a		
<ul> <li>at 690 V rated value</li> <li>at 690 V rated value</li> <li>21.8 kW</li> <li>operating apparent output at AC-6a         <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 500 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value</li> <li>by to 690 V for current peak value n=20 rated value<td>at AC-4</td><td></td></li></ul></li></ul>	at AC-4	
operating apparent output at AC-6a       31 kV·A         • up to 230 V for current peak value n=20 rated value       31 kV·A         • up to 400 V for current peak value n=20 rated value       55 kV·A         • up to 500 V for current peak value n=20 rated value       69 kV·A         • up to 690 V for current peak value n=20 rated value       69 kV·A		
<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 500 V for current peak value n=20 rated value</li> <li>up to 690 V for current peak value n=20 rated 69 kV·A</li> </ul>		21.8 kW
value       • up to 400 V for current peak value n=20 rated value       55 kV·A         • up to 500 V for current peak value n=20 rated value       69 kV·A         • up to 690 V for current peak value n=20 rated       69 kV·A		
value       • up to 500 V for current peak value n=20 rated value       69 kV·A         • up to 690 V for current peak value n=20 rated       69 kV·A		31 kV·A
<ul> <li>• up to 690 V for current peak value n=20 rated</li> <li>• up to 690 V for current peak value n=20 rated</li> <li>• 69 kV·A</li> </ul>		55 kV·A
		69 kV·A
		69 kV·A

<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	21.5 kV·A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	37.4 kV·A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	46.7 kV·A
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	64.5 kV·A
short-time withstand current in cold operating state	
up to 40 °C	
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	1 500 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	1 186 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	851 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	538 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	423 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	5 000 1/h
operating frequency	
• at AC-1 maximum	900 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 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	348 V·A
• at 60 Hz	296 V·A
inductive power factor with closing power of the coil	
• at 50 Hz	0.62
• at 60 Hz	0.55
apparent holding power of magnet coil at AC	

● at 50 Hz	25 V·A
• at 60 Hz	18 V·A
inductive power factor with the holding power of the coil	
• at 50 Hz	0.35
• at 60 Hz	0.41
closing delay	
• at AC	13 50 ms
opening delay	
• at AC	10 21 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2

Auxiliary circuit	
number of NC contacts for auxiliary contacts	
<ul> <li>instantaneous contact</li> </ul>	1
number of NO contacts for auxiliary contacts	
<ul> <li>instantaneous contact</li> </ul>	1
operating current at AC-12 maximum	10 A
operating current at AC-15	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
operating current at DC-12	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
operating current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 125 V rated value	0.9 A
• at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

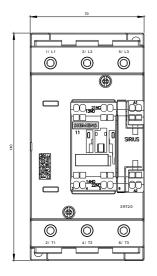
UL/CSA ratings

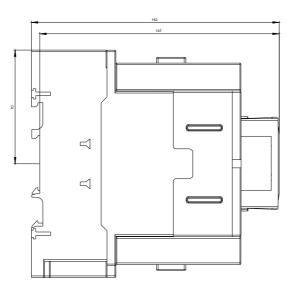
full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	77 A
• at 600 V rated value	62 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	7.5 hp
— at 230 V rated value	15 hp
• for three-phase AC motor	
— at 200/208 V rated value	25 hp
— at 220/230 V rated value	30 hp
— at 460/480 V rated value	60 hp
— at 575/600 V rated value	60 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
— with type of coordination 1 required	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)
— with type of assignment 2 required	gG: 160A (690V,100kA), aM: 80A (690V,100kA), BS88: 125A (415V,80kA)
<ul> <li>— with type of assignment 2 required</li> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	
• for short-circuit protection of the auxiliary switch required	(415V,80kA)
• for short-circuit protection of the auxiliary switch	(415V,80kA)
• for short-circuit protection of the auxiliary switch required	(415V,80kA) gG: 10 A (500 V, 1 kA)
• for short-circuit protection of the auxiliary switch required	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting
• for short-circuit protection of the auxiliary switch required nstallation/ mounting/ dimensions mounting position	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  mounting type	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  mounting type      side-by-side mounting	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  mounting type      side-by-side mounting  height	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  mounting type      side-by-side mounting  height width	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm
<ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>nstallation/ mounting/ dimensions</li> <li>mounting position</li> <li>mounting type         <ul> <li>side-by-side mounting</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> </ul>	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  mounting type      side-by-side mounting  height width depth required spacing	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm
<ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>nstallation/ mounting/ dimensions</li> <li>mounting position</li> <li>mounting type         <ul> <li>side-by-side mounting</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing             <ul> <li>with side-by-side mounting</li> </ul> </li> </ul> </li> </ul>	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm 152 mm
<ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>nstallation/ mounting/ dimensions</li> <li>mounting position</li> <li>mounting type <ul> <li>side-by-side mounting</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>with side-by-side mounting</li> <li>– forwards</li> </ul> </li> </ul>	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm 152 mm
<ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>nstallation/ mounting/ dimensions</li> <li>mounting position</li> <li>mounting type         <ul> <li>side-by-side mounting</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> <li>required spacing         <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>upwards</li> </ul> </li> </ul>	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm 152 mm 20 mm 10 mm
<ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>nstallation/ mounting/ dimensions</li> <li>mounting position</li> <li>mounting type <ul> <li>side-by-side mounting</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> <li>required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> </ul> </li> </ul>	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm 152 mm 20 mm 10 mm
<ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>nstallation/ mounting/ dimensions</li> <li>mounting position</li> <li>mounting type <ul> <li>side-by-side mounting</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> <li>required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> </ul>	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm 152 mm 20 mm 10 mm
<ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>nstallation/ mounting/ dimensions</li> <li>mounting position</li> <li>mounting type <ul> <li>side-by-side mounting</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> <li>required spacing <ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>for grounded parts</li> </ul> </li> </ul>	(415V,80kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes 140 mm 70 mm 152 mm 20 mm 10 mm 0 mm

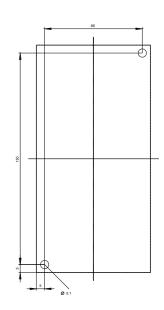
deursusede	10 mm
— downwards	
for live parts	20 mm
— forwards	10 mm
— upwards	
— downwards	10 mm
— at the side	10 mm
Connections/ Terminals	
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	spring-loaded terminals
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Spring-type terminals
● of magnet coil	Spring-type terminals
type of connectable conductor cross-sections	
• for main contacts	
<ul> <li>— finely stranded with core end processing</li> </ul>	2x (2.5 35 mm²), 1x (2.5 50 mm²)
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (10 1/0), 1x (10 2)
connectable conductor cross-section for main	
contacts	
• solid	2.5 16 mm²
• stranded	6 70 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2.5 50 mm²
connectable conductor cross-section for auxiliary	
contacts	
<ul> <li>single or multi-stranded</li> </ul>	0.5 2.5 mm <sup>2</sup>
<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 mm²
• type of connectable conductor cross-sections	
for auxiliary contacts	$2 \times (0.5 - 0.5 \text{ mm}^2)$
— single or multi-stranded	2x (0.5 2.5 mm <sup>2</sup> )
— finely stranded with core end processing	2x (0.5 1.5 mm <sup>2</sup> )
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm²)
<ul> <li>type of connectable conductor cross-sections at</li> </ul>	2x (20 16)
AWG conductors for auxiliary contacts	
AWG number as coded connectable conductor cross section	
• for main contacts	10 2
<ul> <li>for auxiliary contacts</li> </ul>	20 14
Safety related data	
B10 value	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	1 000 000
proportion of dangerous failures	

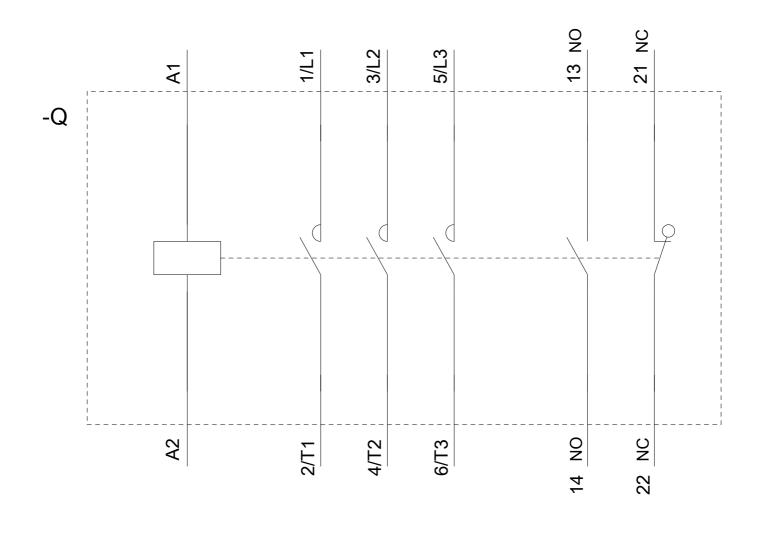
<ul> <li>with low demand</li> </ul>	d rate acc. to SN 31	920	40 %		
• with high demand rate acc. to SN 31920		73 %			
ailure rate [FIT]					
• with low demand rate acc. to SN 31920		100 FIT			
product function					
<ul> <li>mirror contact a</li> </ul>	cc. to IEC 60947-4-	1	Yes		
<ul> <li>positively driven</li> </ul>	operation acc. to IE	EC 60947-5-	No		
1					
1 value for proof test EC 61508	t interval or service l	life acc. to	20 у		
protection against ele	ctrical shock		finger-safe when touched	l vertically from fron	t acc. to IEC 60529
uitability for use safe	ty-related switching	OFF	Yes		
	1-				
ertificates/ approva		_			5140
General Product	Approval				EMC
(m)	(Ch		<u>KC</u>	гпг	
$(\mathbf{m})$	ØF.			FHF	
CCC	CSA	UL		LIIL	RCM
Declaration of Co	-	Test Certif		Marine / Shippi	ng
	Miscellaneous	Type Test Ce		LAN BURE	
		ates/Test Re	eport ficate	A to the to	Register
				SHIPP	
EG-Konf.				ABS	LRS
EG-Konf.				ABS	LRS
	1			ABS	
EG-Konf. Marine / Shipping			nBOVED da		LRS Railway Vibration and Shock
			A <sup>SERPROVED AROCICI</sup>	other	Railway
			AND ROVED AROUND	other	Railway
		RMRS		other	Railway
		RMRS		other	Railway
		RMRS		other	Railway
Marine / Shipping		RMRS		other	Railway
Marine / Shipping	RINA			other	Railway
Marine / Shipping	RINA			other	Railway
Marine / Shipping	nloadcenter (Catalo m/ic10 ordering system)	gs, Brochures	J)	other	Railway
Marine / Shipping	nloadcenter (Catalo n/ic10 ordering system) nens.com/mall/en/en/C	o <b>gs, Brochures</b> Catalog/product?	J)	other Confirmation	Railway
Marine / Shipping	nloadcenter (Catalo n/ic10 ordering system) nens.com/mall/en/en/C	ogs, Brochures Catalog/product? AXorder/default. Characteristics	) mlfb=3RT2045-3AC20 aspx?lang=en&mlfb=3RT2045 s, FAQs,)	other Confirmation	Railway
Marine / Shipping	nloadcenter (Catalo n/ic10 ordering system) nens.com/mall/en/en/C n.siemens.com/WW/C/ nuals, Certificates, ( siemens.com/cs/ww/en	ogs, Brochures Catalog/product? AXorder/default. Characteristics n/ps/3RT2045-3/	,) mlfb=3RT2045-3AC20 aspx?lang=en&mlfb=3RT2045 s, FAQs,) AC20	other Confirmation	Railway Vibration and Shock
Marine / Shipping	nloadcenter (Catalo nloadcenter (Catalo n/ic10 ordering system) nens.com/mall/en/en/C n.siemens.com/WW/C/ nuals, Certificates, ( siemens.com/cs/ww/en duct images, 2D dim	ogs, Brochures Catalog/product? AXorder/default. Characteristics 1/ps/3RT2045-3/ mension drawin	) mlfb=3RT2045-3AC20 aspx?lang=en&mlfb=3RT2045 s, FAQs,)	other Confirmation	Railway Vibration and Shock
Marine / Shipping	nloadcenter (Catalo n/ic10 ordering system) nens.com/mall/en/en/C n.siemens.com/WW/C/ nuals, Certificates, ( siemens.com/cs/ww/en duct images, 2D dim iemens.com/bilddb/cap ng characteristics, 1 <sup>24</sup>	gs, Brochures Catalog/product? AXorder/default. Characteristics 1/ps/3RT2045-3/ tension drawin x_de.aspx?mlfb= t, Let-through of	,) mlfb=3RT2045-3AC20 aspx?lang=en&mlfb=3RT2045 s, FAQs,) AC20 gs, 3D models, device circu =3RT2045-3AC20⟨=en current	other Confirmation	Railway Vibration and Shock

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2045-3AC20&objecttype=14&gridview=view1









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