## **SIEMENS**

## Data sheet

## 3RT2046-3AR60

power contactor, AC-3 95 A, 45 kW / 400 V 1 NO + 1 NC, 400 V AC, 50 Hz 400-440 V/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>	19.8 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	6.6 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	

690 V

 between coil and main contacts acc. to EN 60947-1

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	
• at AC-3 rated value maximum	1 000 V
operating current	
● at AC-1 at 400 V	
	130 A
• at AC-1 at 400 V	130 A
• at AC-1 at 400 V — at ambient temperature 40 °C rated value	130 A 130 A
<ul> <li>at AC-1 at 400 V</li> <li>at ambient temperature 40 °C rated value</li> <li>at AC-1</li> <li>up to 690 V at ambient temperature 40 °C</li> </ul>	
<ul> <li>at AC-1 at 400 V <ul> <li>at ambient temperature 40 °C rated value</li> </ul> </li> <li>at AC-1 <ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> <li>up to 690 V at ambient temperature 60 °C</li> </ul> </li> </ul>	130 A
<ul> <li>at AC-1 at 400 V <ul> <li>at ambient temperature 40 °C rated value</li> </ul> </li> <li>at AC-1 <ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> <li>up to 690 V at ambient temperature 60 °C rated value</li> <li>up to 1000 V at ambient temperature 40 °C</li> </ul> </li> </ul>	130 A 110 A
<ul> <li>at AC-1 at 400 V <ul> <li>at ambient temperature 40 °C rated value</li> </ul> </li> <li>at AC-1 <ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> <li>up to 690 V at ambient temperature 60 °C rated value</li> <li>up to 1000 V at ambient temperature 40 °C rated value</li> <li>up to 1000 V at ambient temperature 60 °C rated value</li> <li>up to 1000 V at ambient temperature 60 °C</li> </ul> </li> </ul>	130 A 110 A 70 A
<ul> <li>at AC-1 at 400 V <ul> <li>at ambient temperature 40 °C rated value</li> </ul> </li> <li>at AC-1 <ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> <li>up to 690 V at ambient temperature 60 °C rated value</li> <li>up to 1000 V at ambient temperature 40 °C rated value</li> <li>up to 1000 V at ambient temperature 40 °C rated value</li> <li>up to 1000 V at ambient temperature 60 °C rated value</li> </ul> </li> </ul>	130 A 110 A 70 A
<ul> <li>at AC-1 at 400 V <ul> <li>at ambient temperature 40 °C rated value</li> </ul> </li> <li>at AC-1 <ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> <li>up to 690 V at ambient temperature 60 °C rated value</li> <li>up to 1000 V at ambient temperature 40 °C rated value</li> <li>up to 1000 V at ambient temperature 40 °C rated value</li> <li>up to 1000 V at ambient temperature 60 °C rated value</li> <li>at AC-3</li> </ul> </li> </ul>	130 A 110 A 70 A 60 A
<ul> <li>at AC-1 at 400 V <ul> <li>at ambient temperature 40 °C rated value</li> </ul> </li> <li>at AC-1 <ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> <li>up to 690 V at ambient temperature 60 °C rated value</li> <li>up to 1000 V at ambient temperature 40 °C rated value</li> <li>up to 1000 V at ambient temperature 60 °C rated value</li> <li>up to 1000 V at ambient temperature 60 °C rated value</li> <li>at AC-3 <ul> <li>at 400 V rated value</li> </ul> </li> </ul></li></ul>	130 A 110 A 70 A 60 A

• at AC-5a up to 690 V rated value	114 A
• at AC-5b up to 400 V rated value	95 A
● at AC-6a	
— up to 230 V for current peak value n=20 rated value	84.4 A
— up to 400 V for current peak value n=20 rated value	84.4 A
— up to 500 V for current peak value n=20 rated value	84.4 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	56.3 A
— up to 400 V for current peak value n=30 rated value	56.3 A
— up to 500 V for current peak value n=30 rated value	56.3 A
— up to 690 V for current peak value n=30 rated value	56.3 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	
	42 A
cycles at AC-4	42 A 30 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>	30 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	30 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	30 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	30 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	30 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	30 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	30 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>with 2 current paths in series at DC-1</li> <li>at 24 V rated value</li> </ul> </li> </ul>	30 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 110 V rated value	30 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 24 V rated value — at 220 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	30 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 • with 2 current paths in series at DC-1 — at 24 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 24 V rated value	30 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 24 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 440 V rated value — at 240 V rated value — at 200 V rated value — at 200 V rated value — at 200 V rated value	30 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 24 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>with 3 current paths in series at DC-1</li> </ul> </li> </ul>	30 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         0.15 A           - at 600 V rated value         0.06 A           - at 600 V rated value         0.00 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 420 V rated value         45 kW           - at 430 V rated value         45 kW           - at 400 V rated value         56 kW           - at 400 V rated value         58 kWA	— at 440 V rated value	4.5 A
e at 1 current path at DC-3 at DC-5 e at 24 V rated value 40 A 2.5 A a t 24 V rated value 2.5 A a t 20 V rated value 0.06 A - at 240 V rated value 0.07 A - at 240 V rated value 100 A - at 220 V rated value 0.08 A - at 220 V rated value 0.07 A - at 240 V rated value 0.08 A - at 220 V rated value 0.08 A - at 220 V rated value 0.07 A - at 220 V rated value 0.16 A - at 240 V rated value 0.08 A - at 250 V rated value 2 K W - at 600 V rated value 2 K W - at 600 V rated value 2 K W - at 600 V rated value 2 K W - at 600 V rated value 2 K W - at 600 V rated value 2 K W - at 600 V rated value 2 K W - at 600 V rated value 2 K W - at 600 V rated value 0 rate 0 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           - with 2 current paths in series at DC-3 at DC-5         -           - at 24 V rated value         100 A           - at 220 V rated value         100 A           - at 220 V rated value         0.42 A           - at 440 V rated value         0.42 A           - at 440 V rated value         0.16 A           - at 220 V rated value         0.16 A           - at 220 V rated value         0.35 A           - at 440 V rated value         100 A           - at 440 V rated value         0.35 A           - at 220 V rated value         35 A           - at 220 V rated value         35 A           - at 230 V rated value         22 kW           - at 230 V rated value         45 kW           - at 230 V rated value         25 kW           - at 230 V rated value         22 kW           - at 630 V rated value         22 kW           - at 630 V rated value         22 kW           - at 630 V rated value         33 kVA           - at 690 V rated value         33 kVA           - at 690 V rated value         33 kVA           - at 690 V for current peak	— at 24 V rated value	40 A
Label of Vale 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 110 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 value0.8 Å- at 440 V rated value0.8 Å- at 440 V rated value0.35 Å- at 440 V rated value0.8 Å- at 440 V rated value0.8 Å- at 440 V rated value0.8 Å- at 230 V rated value0.8 Å- at 230 V rated value0.55 Å- at 230 V rated value0.55 Å- at 400 V rated value22 kW- at 600 V rated value55 kW- at 600 V rated value22 kW- at 600 V rated value55 kW- at 600 V rated value22 kW- at 600 V rated value55 kW- at 600 V rated value22 kW- at 600 V rated value25 kW- at 600 V rated value25 kW- at 600 V rated value25 kW- at 600 V rated value55 kW- at 600 V rated value56 kW- at 600 V rated value27.4 kWoperating power for approx. 20000 operating cyclea38 kVA- at 600 V rated value68 kVA- up to 200 V for current peak value n=20 rated value38 kVA- up to 000 V for current peak value n=20 rated value58 kVA- up to 600 V for c	— at 110 V rated value	2.5 A
Labor V rated value0.06 Å• with 2 current paths in series at DC-3 at DC-5100 Å- at 24 V rated value100 Å- at 10 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-5 at 220 V rated value100 Å- at 220 V rated value100 Å- at 24 V rated value100 Å- at 20 V rated value0.8 Å- at 400 V rated value0.8 Å- at 600 V rated value22 kW- at 230 V rated value45 kW• at AC-3 at 230 V rated value55 kW- at 300 V rated value55 kW- at 690 V rated value76 kW- at 690 V rated value22 kW- at 690 V rated value22 kW- at 690 V rated value35 kW- at 690 V rated value22 kW- at 690 V rated value33 kV-A- at 690 V rated value33 kV-Avalue-• up to 230 V for current peak value n=20 rated value58 kV-Avalue-58 kV-Avalue-58 kV-Avalue-58 kV-Avalue-58 kV-Avalue-58 kV-Avalue-58 kV-Avalue-58 kV-Avalue-58	— 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 400 V rated value</li> <li>at 400 V rated value</li> <li>0.42 A</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 10 V rated value</li> <li>100 A</li> <li>at 20 V rated value</li> <li>100 A</li> <li>at 20 V rated value</li> <li>100 A</li> <li>at 20 V rated value</li> <li>0.6 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 220 V rated value</li> <li>0.5 A</li> <li>at 220 V rated value</li> <li>0.8 A</li> <li>at 400 V rated value</li> <li>0.35 A</li> <li>certaing power</li> <li>at AC-3</li> <li>at AC-3</li> <li>at 300 V rated value</li> <li>45 kW</li> <li>at 400 V rated value</li> <li>55 kW</li> <li>at 400 V rated value</li> <li>55 kW</li> <li>at 400 V rated value</li> <li>55 kW</li> <li>at 690 V rated value</li> <li>55 kW</li> <li>at 400 V rated value</li> <li>55 kW</li> <li>at 400 V rated value</li> <li>58 kW</li> <li>at 690 V rated value</li> <li>58 kW</li> <li>at 400 V rated value</li> <li>57 kW</li> </ul>	— at 440 V rated value	0.15 A
<ul> <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>- at 400 V rated value</li> <li>- at 600 V rated value</li> <li>- at 24 V rated value</li> <li>- at 220 V rated value</li> <li>- at 600 V rated value</li> <li>- at 600 V rated value</li> <li>- at 230 V rated value</li> <li>- at 400 V rated value</li> <li>- at 400 V rated value</li> <li>- at 690 V rated value</li> <li>- at 400 V rated value</li> <li>- at 690 V rated value</li> <li>- at 400 V rated value</li> <li>- at 690 V for current peak value n=20 rated</li> <li>- walue</li> <li>- walue b 690 V for current peak value n=20 rated</li> <li>- walue</li> <li>- walue b 690 V for current peak value n=20 rated</li> <li>- walue</li> <li>- walue b 690 V for current peak value n=20 rated</li> <li>-</li></ul>	— 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>at 600 V rated value</li> <li>at 220 V rated value</li> <li>at 440 V rated value</li> <li>35 A</li> <li>at 440 V rated value</li> <li>35 A</li> <li>at 440 V rated value</li> <li>36 A</li> <li>at 440 V rated value</li> <li>37 A</li> <li>at 400 V rated value</li> <li>38 A</li> <li>at 400 V rated value</li> <li>55 kW</li> <li>at 600 V rated value</li> <li>56 kW</li> <li>at 600 V rated value</li> <li>58 kV-A</li> <li>value</li> <li>value k value n=20 rated</li> <li>58 kV-A</li> <li>value</li> <li>value k value n=20 rated</li> <li>69 kV-A</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 value0.8 A- at 230 V rated value22 kW- at 400 V rated value45 kW- at 400 V rated value22 kW- at 600 V rated value55 kW- at 600 V rated value22 kW- at 600 V rated value33 kV-A- at 600 V rated value n=20 rated38 kV-A- up to 500 V for current peak value n=20 rated58 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>0.35 A</li> <li>operating power</li> <li>et AC-2 at 400 V rated value</li> <li>45 kW</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>45 kW</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>55 kW</li> <li>at 600 V rated value</li> <li>56 kW</li> <li>at 400 V rated value</li> <li>57 kW</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 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 400 V rated value</li> <li>at 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 value</li> <li>cit 600 V for current peak value n=20 rated va</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 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>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 400 V rated value</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>at 55 kW</li> <li>at 690 V rated value</li> <li>55 kW</li> <li>at 690 V rated value</li> <li>22 kW</li> <li>at 690 V rated value</li> <li>35 kW</li> </ul> </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>22 kW</li> <li>at 400 V rated value</li> <li>33 kV-A</li> </ul> <li>operating apparent cutput at AC-6a         <ul> <li>up to 230 V for current peak value n=20 rated</li> <li>48 kV-A</li> <li>value</li> <li>up to 500 V for current peak value n=20 rated</li> <li>58 kV-A</li> <li>value</li> <li>up to 500 V for current peak value n=20 rated</li> <li>69 kV-A</li> <li>value</li> <li>up to 500 V for current peak value n=20 rated</li> <li>69 kV-A</li> </ul> </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       45 kW         - at 230 V rated value       22 kW         - at 400 V rated value       22 kW         - at 600 V rated value       55 kW         - at 600 V rated value       55 kW         - at 600 V rated value       55 kW         - at 600 V rated value       22 kW         - at 600 V rated value       33 kV-A         - at 600 V rated value n=20 rated       58 kV-A         value       - 38 kV-A         - up to 500 V for current peak value n=20 rated       58 kV-A         value       - 37 kV-A         - up to 690 V for current peak value n=20 rated       68 kV-A         value       - 0400 V for current peak value n=20 rated       69 kV-A <td>— at 600 V rated value</td> <td>0.16 A</td>	— 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 440 V rated value</li> <li>at 440 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>0.8 A</li> <li>at AC-2 at 400 V rated value</li> <li>45 kW</li> <li>at AC-3</li> <li>- at 230 V rated value</li> <li>45 kW</li> <li>- at 400 V rated value</li> <li>22 kW</li> <li>- at 500 V rated value</li> <li>- at 690 V rated value</li> <li>55 kW</li> <li>- at 690 V rated value</li> <li>22 kW</li> <li>- at 690 V rated value</li> <li>33 kV-A</li> <li>value</li> <li>- up to 400 V for current peak value n=20 rated value</li> <li>- 58 kV-A</li> <li>value</li> <li>- up to 690 V for current peak value n=20 rated value</li> <li>- 58 kV-A</li> <li>- 400 V for current peak value n=20 rated value</li> <li>- 58 kV-A</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current peak value n=20 rated value</li> <li>- 100 V for current pe</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 220 V rated value</li> <li>at 440 V rated value</li> <li>0.8 A</li> <li>at 600 V rated value</li> <li>0.35 A</li> </ul> operating power <ul> <li>at AC-2 at 400 V rated value</li> <li>45 kW</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>22 kW</li> <li>at 400 V rated value</li> <li>45 kW</li> <li>at 400 V rated value</li> <li>55 kW</li> <li>at 600 V rated value</li> <li>55 kW</li> <li>at 600 V rated value</li> <li>55 kW</li> <li>at 600 V rated value</li> <li>57 kW</li> </ul> operating power for approx. 200000 operating cycles at AC-4 <ul> <li>at 400 V rated value</li> <li>22 kW</li> <li>at 690 V rated value</li> <li>22 kW</li> <li>at 690 V rated value</li> <li>22 kW</li> <li>at 690 V rated value</li> <li>33 kV-A value</li> <li>up to 230 V for current peak value n=20 rated value</li> <li>value</li> <li>up to 500 V for current peak value n=20 rated value</li> <li>58 kV-A value</li> <li>13 kV-A value</li> <li>58 kV-A value</li> <li>58 kV-A value</li> <li>59 kV-A value</li> </ul>	— at 24 V rated value	100 A
- at 440 V rated value0.8 A- at 600 V rated value0.35 Aoperating power45 kW- at AC-2 at 400 V rated value45 kW- at AC-322 kW- at 230 V rated value45 kW- at 400 V rated value55 kW- at 600 V rated value55 kW- at 600 V rated value75 kWoperating power for approx. 200000 operating cycles at AC-422 kW- at 690 V rated value22 kW- at 690 V rated value55 kW- at 690 V rated value22 kW- at 690 V rated value33 kV-A- at 400 V rated value27.4 kWoperating apparent output at AC-6a value33 kV-A- outp to 200 V for current peak value n=20 rated value58 kV-A- outp to 500 V for current peak value n=20 rated value73 kV-A- outp 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 power45 kW- at AC-2 at 400 V rated value45 kW- at AC-322 kW- at 230 V rated value45 kW- at 400 V rated value45 kW- at 500 V rated value55 kW- at 690 V rated value75 kWoperating power for approx. 200000 operating cycles22 kWat AC-422 kWoperating apparent output at AC-6a22 kW• up to 230 V for current peak value n=20 rated33 kV-Avalue58 kV-A• up to 500 V for current peak value n=20 rated73 kV-Avalue73 kV-A• up to 690 V for current peak value n=20 rated69 kV-A	— at 220 V rated value	35 A
operating power• at AC-2 at 400 V rated value45 kW• at AC-322 kW- at 230 V rated value22 kW- at 400 V rated value45 kW- at 500 V rated value55 kW- at 690 V rated value75 kWoperating power for approx. 200000 operating cycles75 kWat AC-422 kW• at 400 V rated value22 kW• at 400 V rated value22 kW• at 690 V rated value22 kW• at 690 V rated value27.4 kWoperating apparent output at AC-6a33 kV-A• up to 230 V for current peak value n=20 rated value58 kV-A• up to 400 V for current peak value n=20 rated value73 kV-A• up to 500 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 value45 kW• at AC-322 kW- at 230 V rated value22 kW- at 400 V rated value45 kW- at 500 V rated value55 kW- at 690 V rated value75 kWoperating power for approx. 200000 operating cycles at AC-422 kW• at 400 V rated value22 kW• at 690 V rated value22 kW• at 690 V rated value21 kW• at 690 V rated value33 kV-A• up to 230 V for current peak value n=20 rated value33 kV-A• up to 400 V for current peak value n=20 rated value58 kV-A• up to 500 V for current peak value n=20 rated value73 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 AC-3</li> <li>at AC-3</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>45 kW</li> <li>at 500 V rated value</li> <li>55 kW</li> <li>at 690 V rated value</li> <li>75 kW</li> </ul> operating power for approx. 200000 operating cycles at AC-4 at AC-4 at 400 V rated value 22 kW at 400 V rated value 22 kW operating apparent output at AC-6a at 690 V rated value n=20 rated value bup to 230 V for current peak value n=20 rated value bup to 400 V for current peak value n=20 rated value bup to 500 V for current peak value n=20 rated value bup to 500 V for current peak value n=20 rated value bup to 500 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 500 V for current peak value n=20 rated value bup to 500 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 690 V for current peak value n=20 rated value bup to 500 V for current peak value n=20 rated value bup	operating power	
- at 230 V rated value22 kW- at 400 V rated value45 kW- at 500 V rated value55 kW- at 690 V rated value75 kWat AC-422 kW• at 400 V rated value22 kW• at 400 V rated value22 kW• at 690 V rated value27.4 kWoperating apparent output at AC-6a33 kV-A• up to 230 V for current peak value n=20 rated value58 kV-A• up to 500 V for current peak value n=20 rated value58 kV-A• up to 500 V for current peak value n=20 rated value69 kV-A	• at AC-2 at 400 V rated value	45 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>at 600 V rated value</li> <li>55 kW</li> <li>at AC-4</li> <li>operating power for approx. 200000 operating cycles at AC-4</li> <li>at 400 V rated value</li> <li>22 kW</li> <li>at 690 V rated value</li> <li>27.4 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>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>09 kV-A</li> </ul>	• at AC-3	
- at 500 V rated value55 kW- at 690 V rated value75 kWoperating power for approx. 200000 operating cycles at AC-422 kW• at 400 V rated value22 kW• at 690 V rated value27.4 kWoperating apparent output at AC-6a33 kV·A• up to 230 V for current peak value n=20 rated value58 kV·A• up to 400 V for current peak value n=20 rated value58 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A	— at 230 V rated value	22 kW
	— at 400 V rated value	45 kW
operating power for approx. 200000 operating cycles at AC-4• at 400 V rated value22 kW• at 690 V rated value27.4 kWoperating apparent output at AC-6a33 kV·A• up to 230 V for current peak value n=20 rated value33 kV·A• up to 400 V for current peak value n=20 rated value58 kV·A• up to 500 V for current peak value n=20 rated value58 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A	— at 500 V rated value	55 kW
at AC-4• at 400 V rated value22 kW• at 690 V rated value27.4 kWoperating apparent output at AC-6a• up to 230 V for current peak value n=20 rated value33 kV·A• up to 400 V for current peak value n=20 rated value58 kV·A• up to 500 V for current peak value n=20 rated value58 kV·A• up to 500 V for current peak value n=20 rated value69 kV·A	— at 690 V rated value	75 kW
<ul> <li>at 690 V rated value</li> <li>at 690 V rated value</li> <li>27.4 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>b to 500 V for current peak value n=20 rated value</li> <li>c up to 500 V for current peak value n=20 rated value</li> <li>b to 500 V for current peak value n=20 rated value</li> <li>c up to 690 V for current peak value n=20 rated</li> <li>c value</li> <li>c up to 690 V for current peak value n=20 rated</li> <li>c value</li> <li>c value</li> <li>c value</li> <li>c value</li> <li>c value n=20 rated to 69 kV-A</li> </ul> </li> </ul>		
operating apparent output at AC-6a       33 kV·A         • up to 230 V for current peak value n=20 rated value       33 kV·A         • up to 400 V for current peak value n=20 rated value       58 kV·A         • up to 500 V for current peak value n=20 rated value       58 kV·A         • up to 500 V for current peak value n=20 rated value       69 kV·A		22 kW
<ul> <li>up to 230 V for current peak value n=20 rated value</li> <li>up to 400 V for current peak value n=20 rated value</li> <li>up to 500 V for current peak value n=20 rated value</li> <li>up to 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>	• at 690 V rated value	27.4 kW
value       • up to 400 V for current peak value n=20 rated value       58 kV·A         • up to 500 V for current peak value n=20 rated value       73 kV·A         • up to 690 V for current peak value n=20 rated value       69 kV·A	operating apparent output at AC-6a	
value       • up to 500 V for current peak value n=20 rated value       73 kV·A         • up to 690 V for current peak value n=20 rated       69 kV·A		33 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>		58 kV·A
		73 kV·A
		69 kV·A

<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	22.4 kV·A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	39 kV·A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	48.7 kV·A
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	67.3 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>	1 725 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	1 297 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	946 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	610 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	486 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	350 1/h
• at AC-3 maximum	850 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	400 V
• at 60 Hz rated value	400 440 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)

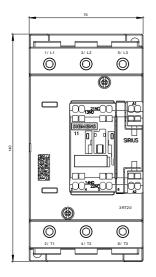
UL/CSA ratings

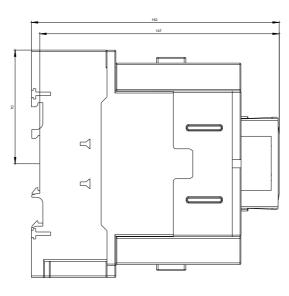
full-load current (FLA) for three-phase AC motor		
• at 480 V rated value	96 A	
• at 600 V rated value	77 A	
yielded mechanical performance [hp]		
<ul> <li>for single-phase AC motor</li> </ul>		
— at 110/120 V rated value	10 hp	
— at 230 V rated value	20 hp	
<ul> <li>for three-phase AC motor</li> </ul>		
— at 200/208 V rated value	30 hp	
— at 220/230 V rated value	30 hp	
— at 460/480 V rated value	75 hp	
— at 575/600 V rated value	75 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)	
	gG: 160 A (690 V, 100 kA), aM: 100 A (690 V, 100 kA), BS88: 12	
— with type of assignment 2 required		
	gG: 160 A (690 V, 100 kA), aM: 100 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA) gG: 10 A (500 V, 1 kA)	
<ul> <li>— with type of assignment 2 required</li> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	A (415 V, 80 kA)	
• for short-circuit protection of the auxiliary switch required	A (415 V, 80 kA)	
• for short-circuit protection of the auxiliary switch	A (415 V, 80 kA)	
• for short-circuit protection of the auxiliary switch required	A (415 V, 80 kA) gG: 10 A (500 V, 1 kA)	
• for short-circuit protection of the auxiliary switch required	A (415 V, 80 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be	
• for short-circuit protection of the auxiliary switch required	A (415 V, 80 kA) 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	A (415 V, 80 kA) 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	A (415 V, 80 kA) 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	A (415 V, 80 kA) 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 width depth	A (415 V, 80 kA) 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	A (415 V, 80 kA) 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	A (415 V, 80 kA) 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	
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	A (415 V, 80 kA) 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> </ul> </li> <li>height <ul> <li>width</li> <li>depth</li> <li>required spacing <ul> <li>with side-by-side mounting</li> </ul> </li> </ul></li></ul>	A (415 V, 80 kA) 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>	A (415 V, 80 kA) 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>	A (415 V, 80 kA) 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>	A (415 V, 80 kA) 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 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> </ul> </li> <li>height <ul> <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>	A (415 V, 80 kA) 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 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> </ul> </li> <li>height <ul> <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>	A (415 V, 80 kA) 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	

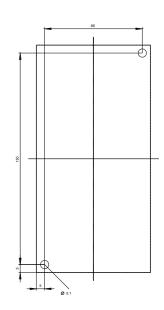
deursusede	10 mm
— downwards	
• for live parts	20 mm
— forwards	10 mm
— upwards	
— downwards	10 mm
— at the side	10 mm
Connections/ Terminals	
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	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	

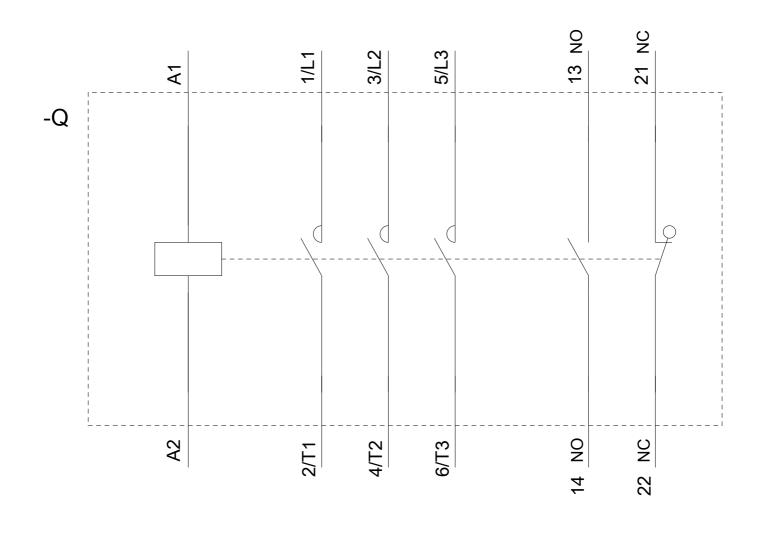
<ul> <li>with low demand rate acc. to SN 3</li> <li>with high demand rate acc. to SN</li> </ul>	31920	40 %			
• with high demand rate acc. to SN		10 /0			
• with high demand rate acc. to SN 31920		73 %			
failure rate [FIT]					
• with low demand rate acc. to SN 3	• with low demand rate acc. to SN 31920		100 FIT		
product function					
<ul> <li>mirror contact acc. to IEC 60947-4</li> </ul>	4-1	Yes			
<ul> <li>positively driven operation acc. to</li> </ul>	ositively driven operation acc. to IEC 60947-5- No				
1					
T1 value for proof test interval or service IEC 61508	e life acc. to	20 у			
protection against electrical shock		finger-safe when touch	ned vertically from fror	nt acc. to IEC 60529	
suitability for use safety-related switchin	ng OFF	Yes			
Certificates/ approvals					
General Product Approval				EMC	
		KC	r M F		
$(\alpha c)$ (36)	(YL)		FHI		
CCC CSA	UL		LIIL	RCM	
Declaration of Conformity	Test Certif		Marine / Shippi	ing	
Miscellaneous	Type Test Ce		ER CAN BURE	Hoyde	
	ates/Test Re	eport ficate	A C	Register	
			on the so	Tregister	
EG-Konf.			ABS	LRS	
EG-Konf.			ABS	LRS	
			ABS		
EG-Konf. Marine / Shipping		ngOVED &_		LRS Railway Vibration and Shock	
		AND PROVED PROJECT	other	Railway	
		ANTROVED PRODUCT	other	Railway	
	RMRS		other	Railway	
Marine / Shipping	RMRS		other	Railway	
Marine / Shipping	RMRS		other	Railway	
Marine / Shipping	RMRS		other	Railway	
Marine / Shipping         Image: Shipping mark		DNVGLCOM/AF	other	Railway	
Marine / Shipping         Image: Shipping big         Image: Shipping <th></th> <th>DNVGLCOM/AF</th> <td>other</td> <td>Railway</td>		DNVGLCOM/AF	other	Railway	
Marine / Shipping         Image: Shipping of the second s	alogs, Brochures	,)	other	Railway	
Marine / Shipping         Image: Shipping of the second s	alogs, Brochures	mlfb=3RT2046-3AR60	other Confirmation	Railway	
Marine / Shipping	alogs, Brochures n/Catalog/product? /CAXorder/default. s, Characteristics	(June 1997) (June	other Confirmation	Railway	
Marine / Shipping         Image: Second state         PRS         Image: Second state         Second state         Information- and Downloadcenter (Catae         https://www.siemens.com/ic10         Industry Mall (Online ordering system)         https://mall.industry.siemens.com/mall/en/en         Cax online generator         http://support.automation.siemens.com/WW/         Service&Support (Manuals, Certificates)	alogs, Brochures n/Catalog/product? /CAXorder/default. s, Characteristics /en/ps/3RT2046-3/ imension drawin	mlfb=3RT2046-3AR60 aspx?lang=en&mlfb=3RT20 asp, FAQs,) AR60 ags, 3D models, device ci	O46-3AR60	Railway         Vibration and Shock	
Marine / Shipping         Image database (product images, 2D di http://www.automation.siemens.com/cs/ww/	alogs, Brochures h/Catalog/product? /CAXorder/default. s, Characteristics /en/ps/3RT2046-3/ imension drawin cax_de.aspx?mlfb= l²t, Let-through of	mlfb=3RT2046-3AR60 aspx?lang=en&mlfb=3RT20 aspx?lang=e	O46-3AR60	Railway         Vibration and Shock	
Marine / Shipping         Image database (product images, 2D di http://www.automation.siemens.com/cs/ww/	alogs, Brochures h/Catalog/product? /CAXorder/default. s, Characteristics /en/ps/3RT2046-3/ imension drawin cax_de.aspx?mlfb= l²t, Let-through of	mlfb=3RT2046-3AR60 aspx?lang=en&mlfb=3RT20 aspx?lang=e	O46-3AR60	Railway         Vibration and Shock	

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2046-3AR60&objecttype=14&gridview=view1









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