## **SIEMENS**

## Data sheet

## 3RT1054-1NB36

CONTACTOR, 55KW/400V/AC-3 AC(50...60HZ)/DC OPERATION UC 21...27,3V AUXIL. CONTACTS 2NO+2NC 3-POLE, SIZE S6 WITH BOX TERMINALS ELECTRONIC OPERATING MECHANISM WITH PLC INTERFACE 24V DC SCREW TERMINAL



Figure similar

Product brand name	SIRIUS
Product designation	Power contactor
Product type designation	3RT1
General technical data	
Size of contactor	S6
Product extension	
<ul> <li>function module for communication</li> </ul>	No
Auxiliary switch	Yes
Insulation voltage	
rated value	1 000 V
Degree of pollution	3
Surge voltage resistance rated value	8 kV
maximum permissible voltage for safe isolation	
<ul> <li>between coil and main contacts acc. to EN</li> </ul>	690 V
60947-1	
Protection class IP	
• on the front	IP00

● of the terminal	IP00	
Shock resistance at rectangular impulse		
• at AC	8,5g / 5 ms, 4,2g / 10 ms	
• at DC	8,5g / 5 ms, 4,2g / 10 ms	
Shock resistance with sine pulse	-,-;;;:;-;-;:	
• at AC	13,4g / 5 ms, 6,5g / 10 ms	
• at DC	13,4g / 5 ms, 6,5g / 10 ms	
Mechanical service life (switching cycles)		
• of contactor typical	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	
Ambient conditions		
Ambient temperature		
during operation	-25 +60 °C	
• during storage	-55 +80 °C	
Main circuit		
Number of poles for main current circuit	3	
Number of NO contacts for main contacts	3	
Operating voltage		
<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	160 A	
• at AC-1		
— up to 690 V at ambient temperature 40 °C rated value	160 A	
— up to 690 V at ambient temperature 60 °C rated value	140 A	
— up to 1000 V at ambient temperature 40 °C rated value	80 A	
— up to 1000 V at ambient temperature 60 °C rated value	80 A	
• at AC-2 at 400 V rated value	115 A	
● at AC-3		
— at 400 V rated value	115 A	
— at 500 V rated value	115 A	
— at 690 V rated value	115 A	
— at 1000 V rated value	53 A	
Connectable conductor cross-section in main circuit at AC-1		

• at 40 °C minimum permissible70 mm²Operating current for approx. 20000 operating cycles at AC-454 A• at 400 V rated value54 A• at 600 V rated value48 AOperating current-• at 100 V rated value160 A- at 24 V rated value18 A- at 240 V rated value0.8 A- at 420 V rated value0.5 A- at 420 V rated value0.5 A- at 420 V rated value160 A- at 420 V rated value0.5 A- at 420 V rated value0.5 A- at 420 V rated value160 A- at 420 V rated value160 A- at 420 V rated value160 A- at 410 V rated value160 A- at 420 V rated value160 A- at 410 V rated value160 A- at 420 V rated value160 A <tr< th=""><th>• at 60 °C minimum permissible</th><th>50 mm<sup>2</sup></th></tr<>	• at 60 °C minimum permissible	50 mm <sup>2</sup>
Operating current for approx. 20000 operating cycles at AC-4         is at 400 V rated value         54 A           • at 600 V rated value         48 A           Operating current         -         48 A           • at 100 V rated value         160 A		70 mm <sup>2</sup>
• at 400 V rated value         54 Å           • at 690 V rated value         48 Å           Operating current         48 Å           • at 1 current path at DC-1         -           - at 24 V rated value         160 Å           - at 110 V rated value         18 Å           - at 220 V rated value         0.8 Å           - at 600 V rated value         0.8 Å           - at 600 V rated value         0.8 Å           - at 600 V rated value         160 Å           - at 24 V rated value         160 Å           - at 24 V rated value         160 Å           - at 40 V rated value         160 Å           - at 40 V rated value         160 Å           - at 40 V rated value         160 Å           - at 400 V rated value         160 Å           - at 24 V rated value         160 Å           - at 110 V rated value         160 Å           - at 24 V rated value         160 Å           - at 24 V rated value         160 Å           - at 100 V rated value         160 Å           - at 24 V rated value         160 Å	·	
• at 680 V rated value         48 A           Operating current         -           • at 1 current path at DC-1         -           - at 24 V rated value         180 A           - at 220 V rated value         3.4 A           - at 220 V rated value         0.8 A           - at 400 V rated value         0.8 A           - at 400 V rated value         0.5 A           • with 2 current paths in series at DC-1         -           - at 240 V rated value         0.5 A           • with 2 current paths in series at DC-1         -           - at 240 V rated value         160 A           - at 200 V rated value         20 A           - at 410 V rated value         160 A           - at 200 V rated value         160 A           - at 200 V rated value         160 A           - at 24 V rated value         160 A           - at 24 V rated value         160 A           - at 200 V rated value         160 A           - at 200 V rated value         160 A           - at 210 V rated value         160 A           - at 220 V rated value         160 A           - at 24 V rated value         160 A           - at 24 V rated value         160 A           - at 24 V rated value         160	cycles at AC-4	
Operating current         Instrument path at DC-1           - at 24 V rated value         160 A           - at 10 V rated value         18 A           - at 24 V rated value         3.4 A           - at 440 V rated value         0.5 A           • with 2 current paths in series at DC-1         -           - at 24 V rated value         0.5 A           • with 2 current paths in series at DC-1         -           - at 210 V rated value         160 A           - at 220 V rated value         160 A           - at 400 V rated value         160 A           - at 410 V rated value         160 A           - at 220 V rated value         160 A           - at 24 V rated value         160 A           - at 24 V rated valu	• at 400 V rated value	54 A
• at 1 current path at DC-1         160 A           - at 24 V rated value         160 A           - at 110 V rated value         18 A           - at 220 V rated value         34 A           - at 220 V rated value         0.8 A           - at 400 V rated value         0.5 A           - at 200 V rated value         160 A           - at 24 V rated value         160 A           - at 22 V rated value         20 A           - at 22 V rated value         160 A           - at 22 V rated value         160 A           - at 22 V rated value         160 A           - at 20 V rated value         160 A           - at 20 V rated value         160 A           - at 20 V rated value         160 A           - at 24 V rated value         160 A           - at 24 V rated value         160 A           - at 20 V rated value         160 A           - at 40 V rated value         160 A           - at 20 V rated value         0.6 A           - at 40 V rated value         0.17 A           - at 400 V rated value         0.17 A	• at 690 V rated value	48 A
- at 24 V rated value       160 A         - at 110 V rated value       18 A         - at 220 V rated value       3.4 A         - at 440 V rated value       0.8 A         - at 400 V rated value       0.5 A         • with 2 current paths in series at DC-1       -         - at 24 V rated value       160 A         - at 210 V rated value       20 A         - at 220 V rated value       3.2 A         - at 400 V rated value       160 A         - at 400 V rated value       160 A         - at 220 V rated value       160 A         - at 220 V rated value       160 A         - at 400 V rated value       160 A         - at 220 V rated value       160 A         - at 410 V rated value       180 A         - at 220 V rated value       180 A         - at 220 V rated value       180 A         - at 410 V rated value       180 A         - at 40 V rated value       115 A         - at 400 V rated value       25 A         - at 40 V rated value       0.6 A         - at 40 V rated value       0.12 A         - at 400 V rated value       0.12 A         - at 400 V rated value       0.12 A         - at 400 V rated value       0.25 A </td <td>Operating current</td> <td></td>	Operating current	
- at 110 V rated value       18 A         - at 220 V rated value       3.4 A         - at 440 V rated value       0.8 A         - at 600 V rated value       0.5 A         • with 2 current paths in series at DC-1       -         - at 24 V rated value       160 A         - at 110 V rated value       20 A         - at 110 V rated value       20 A         - at 400 V rated value       3.2 A         - at 600 V rated value       3.2 A         - at 600 V rated value       160 A         - at 220 V rated value       160 A         - at 400 V rated value       160 A         - at 400 V rated value       160 A         - at 20 V rated value       160 A         - at 20 V rated value       160 A         - at 400 V rated value       160 A         - at 20 V rated value       160 A         - at 20 V rated value       11.5 A         - at 600 V rated value       2.5 A         - at 210 V rated value       0.6 A         - at 440 V rated value       0.17 A         - at 440 V rated value       0.12 A         • with 2 current paths in series at DC-3 at DC-5       -         - at 440 V rated value       160 A         - at 440 V rated value	<ul> <li>at 1 current path at DC-1</li> </ul>	
- at 220 V rated value       3.4 A         - at 440 V rated value       0.8 A         - at 600 V rated value       0.5 A         • with 2 current paths in series at DC-1       -         - at 24 V rated value       160 A         - at 10 V rated value       160 A         - at 200 V rated value       160 A         - at 200 V rated value       20 A         - at 400 V rated value       3.2 A         - at 600 V rated value       1.6 A         • with 3 current paths in series at DC-1       -         - at 24 V rated value       160 A         - at 24 V rated value       160 A         - at 24 V rated value       160 A         - at 200 V rated value       160 A         - at 20 V rated value       160 A         - at 20 V rated value       160 A         - at 20 V rated value       160 A         - at 210 V rated value       160 A         - at 220 V rated value       160 A         - at 400 V rated value       160 A         - at 210 V rated value       160 A         - at 220 V rated value       0.6 A         - at 24 V rated value       0.17 A         - at 240 V rated value       0.17 A         - at 240 V rated value       0.12 A<	— at 24 V rated value	160 A
	— at 110 V rated value	18 A
at 600 V rated value       0.5 A         • with 2 current paths in series at DC-1	— at 220 V rated value	3.4 A
<ul> <li>with 2 current paths in series at DC-1</li> <li>at 24 V rated value</li> <li>at 110 V rated value</li> <li>at 20 V rated value</li> <li>20 A</li> <li>at 440 V rated value</li> <li>32 A</li> <li>at 600 V rated value</li> <li>16 A</li> <li>with 3 current paths in series at DC-1</li> <li>at 24 V rated value</li> <li>160 A</li> <li>at 110 V rated value</li> <li>160 A</li> <li>at 220 V rated value</li> <li>160 A</li> <li>at 440 V rated value</li> <li>160 A</li> <li>at 24 V rated value</li> <li>160 A</li> <li>at 220 V rated value</li> <li>160 A</li> <li>at 220 V rated value</li> <li>160 A</li> <li>at 440 V rated value</li> <li>160 A</li> <li>at 1 current path at DC-3 at DC-5</li> <li>at 220 V rated value</li> <li>0.6 A</li> <li>at 440 V rated value</li> <li>0.17 A</li> <li>at 600 V rated value</li> <li>0.12 A</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>0.12 A</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>0.65 A</li> <li>at 440 V rated value</li> <li>0.65 A</li> <li>at</li></ul>	— at 440 V rated value	0.8 A
- at 24 V rated value       160 A         - at 110 V rated value       160 A         - at 220 V rated value       20 A         - at 440 V rated value       3.2 A         - at 600 V rated value       1.6 A         • with 3 current paths in series at DC-1       -         - at 24 V rated value       160 A         - at 110 V rated value       160 A         - at 220 V rated value       160 A         - at 440 V rated value       160 A         - at 440 V rated value       160 A         - at 440 V rated value       160 A         - at 600 V rated value       160 A         - at 600 V rated value       11.5 A         - at 600 V rated value       160 A         - at 110 V rated value       160 A         - at 24 V rated value       160 A         - at 24 V rated value       160 A         - at 24 V rated value       0.6 A         - at 200 V rated value       0.17 A         - at 200 V rated value       0.12 A         • with 2 current paths in series at DC-3 at DC-5       -         - at 24 V rated value       160 A         - at 24 V rated value       0.65 A         - at 24 V rated value       0.65 A         - at 440 V rated value	— at 600 V rated value	0.5 A
- at 110 V rated value       160 A         - at 220 V rated value       20 A         - at 440 V rated value       3.2 A         - at 600 V rated value       1.6 A         • with 3 current paths in series at DC-1       -         - at 24 V rated value       160 A         - at 110 V rated value       160 A         - at 20 V rated value       160 A         - at 20 V rated value       160 A         - at 440 V rated value       160 A         - at 20 V rated value       160 A         - at 440 V rated value       160 A         - at 440 V rated value       160 A         - at 600 V rated value       160 A         - at 600 V rated value       100 A         - at 440 V rated value       160 A         - at 110 V rated value       160 A         - at 220 V rated value       160 A         - at 440 V rated value       100 A         - at 220 V rated value       0.6 A         - at 440 V rated value       0.17 A         - at 600 V rated value       0.12 A         • with 2 current paths in series at DC-3 at DC-5       -         - at 24 V rated value       160 A         - at 24 V rated value       160 A         - at 440 V rated value	<ul> <li>with 2 current paths in series at DC-1</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>32 A</li> <li>at 600 V rated value</li> <li>16 A</li> <li>with 3 current paths in series at DC-1</li> <li>at 24 V rated value</li> <li>160 A</li> <li>at 110 V rated value</li> <li>160 A</li> <li>at 220 V rated value</li> <li>160 A</li> <li>at 440 V rated value</li> <li>160 A</li> <li>at 440 V rated value</li> <li>160 A</li> <li>at 440 V rated value</li> <li>160 A</li> <li>at 220 V rated value</li> <li>160 A</li> <li>at 440 V rated value</li> <li>160 A</li> <li>at 440 V rated value</li> <li>160 A</li> <li>at 600 V rated value</li> <li>160 A</li> <li>at 600 V rated value</li> <li>17 A</li> <li>at 220 V rated value</li> <li>0.6 A</li> <li>at 440 V rated value</li> <li>0.17 A</li> <li>at 600 V rated value</li> <li>0.12 A</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>160 A</li> <li>at 110 V rated value</li> <li>0.5 A</li> <li>at 440 V rated value</li> <li>0.6 A</li> <li>at 440 V rated value</li> <li>0.65 A</li>     &lt;</ul>	— at 24 V rated value	160 A
Index rates32 A- at 440 V rated value3.2 A- at 600 V rated value1.6 A• with 3 current paths in series at DC-1160 A- at 24 V rated value160 A- at 110 V rated value160 A- at 220 V rated value160 A- at 440 V rated value160 A- at 600 V rated value11.5 A- at 600 V rated value140 AOperating current160 A- at 110 V rated value160 A- at 220 V rated value160 A- at 110 V rated value160 A- at 24 V rated value160 A- at 20 V rated value0.6 A- at 440 V rated value0.17 A- at 600 V rated value0.12 A• with 2 current paths in series at DC-3 at DC-5 at 24 V rated value160 A- at 440 V rated value0.12 A• with 2 current paths in series at DC-3 at DC-5 at 20 V rated value160 A- at 410 V rated value0.65 A- at 440 V rated value0.65 A- at 440 V rated value0.65 A- at 440 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5 at 440 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value0.65 A- at 40 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value160 A	— at 110 V rated value	160 A
<ul> <li>at 100 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> <li>at 24 V rated value</li> <li>at 210 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 600 A</li> <li>at 440 V rated value</li> <li>at 10 C-3 at DC-5</li> <li>at 220 V rated value</li> <li>at 10 V rated value</li> <li>at 10 C-3 at DC-5</li> <li>at 220 V rated value</li> <li>at 10 V rated value</li> <li>at 200 V rated value</li> <li>at 10 V rated value</li> <li>at 10 V rated value</li> <li>at 200 V rated value</li> <li>at 200 V rated value</li> <li>at 200 V rated value</li> <li>at 10 V rated value</li> <li>at 200 V rated value</li> <li>at 440 V rated value</li> <li>at 200 V rated value</li> <li>at 440 V rated value</li> <li>at 200 V rated value</li> <li>at 200 V rated value</li> <li>at 200 V rated value</li> <li>at 440 V rated value</li> <li>at 200 V rated value</li> <li>at 200 V rated value</li> <li>at 210 V rated value</li> <li>at 210 V rated value</li> <li>at 440 V rated value</li> <li>at 210 V rated value</li> <li>at 440 V rated value<!--</td--><td>— at 220 V rated value</td><td>20 A</td></li></ul>	— at 220 V rated value	20 A
<ul> <li>with 3 current paths in series at DC-1</li> <li>at 24 V rated value</li> <li>160 A</li> <li>at 110 V rated value</li> <li>160 A</li> <li>at 220 V rated value</li> <li>160 A</li> <li>at 440 V rated value</li> <li>11.5 A</li> <li>at 600 V rated value</li> <li>4 A</li> </ul> Operating current <ul> <li>at 1 current path at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>160 A</li> <li>at 110 V rated value</li> <li>160 A</li> <li>at 20 V rated value</li> <li>160 A</li> <li>at 24 V rated value</li> <li>160 A</li> <li>at 24 V rated value</li> <li>160 A</li> <li>at 10 V rated value</li> <li>0.6 A</li> <li>at 440 V rated value</li> <li>0.17 A</li> <li>at 600 V rated value</li> <li>0.12 A</li> </ul> • with 2 current paths in series at DC-3 at DC-5 <ul> <li>at 24 V rated value</li> <li>160 A</li> <li>at 110 V rated value</li> <li>0.5 A</li> <li>at 24 V rated value</li> <li>0.65 A</li> <li>at 440 V rated value</li> <li>0.65 A</li> <li>at 220 V rated value</li> <li>0.65 A</li> <li>at 24 V rated value</li> <li>0.65 A</li> <li>at 24 V rated value</li> <li>0.65 A</li> <li>at 440 V rated value</li> <li>0.65 A</li> <li>at 600 V rated value</li> <li>0.65 A</li> <li>at 440 V rated value</li> &lt;</ul>	— at 440 V rated value	3.2 A
- at 24 V rated value       160 A         - at 110 V rated value       160 A         - at 220 V rated value       160 A         - at 440 V rated value       11.5 A         - at 600 V rated value       4 A         Operating current         - at 220 V rated value       160 A         - at 10 V rated value       160 A         - at 24 V rated value       160 A         - at 24 V rated value       160 A         - at 220 V rated value       0.6 A         - at 220 V rated value       0.6 A         - at 440 V rated value       0.17 A         - at 600 V rated value       0.12 A         - at 220 V rated value       160 A         - at 220 V rated value       0.60 A         - at 110 V rated value       0.160 A         - at 440 V rated value       0.17 A         - at 24 V rated value       0.160 A         - at 210 V rated value       160 A         - at 220 V rated value       0.65 A         - at 220 V rated value       0.65 A         - at 440 V rated value       0.65 A         - at 600 V rated value       0.37 A         - at 600 V rated value       0.37 A         - with 3 current paths in series at DC-3 at DC-5	— at 600 V rated value	1.6 A
- at 110 V rated value       160 A         - at 220 V rated value       160 A         - at 220 V rated value       11.5 A         - at 600 V rated value       4 A         Operating current         - at 10 V rated value       160 A         - at 24 V rated value       160 A         - at 10 V rated value       160 A         - at 220 V rated value       0.6 A         - at 220 V rated value       0.17 A         - at 24 V rated value       0.12 A         - at 24 V rated value       160 A         - at 24 V rated value       0.6 A         - at 440 V rated value       0.6 A         - at 440 V rated value       0.12 A         - at 24 V rated value       160 A         - at 220 V rated value       160 A         - at 220 V rated value       0.65 A         - at 220 V rated value       160 A         - at 220 V rated value       160 A         - at 220 V rated value       0.65 A         - at 440 V rated value       0.65 A         - at 600 V rated value       0.37 A <td< td=""><td><ul> <li>with 3 current paths in series at DC-1</li> </ul></td><td></td></td<>	<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
- at 220 V rated value       160 A         - at 420 V rated value       11.5 A         - at 600 V rated value       4 A         Operating current         • at 1 current path at DC-3 at DC-5       -         - at 24 V rated value       160 A         - at 220 V rated value       160 A         - at 24 V rated value       160 A         - at 220 V rated value       0.6 A         - at 440 V rated value       0.17 A         - at 600 V rated value       0.12 A         • with 2 current paths in series at DC-3 at DC-5       -         - at 24 V rated value       160 A         - at 440 V rated value       0.12 A         • with 2 current paths in series at DC-3 at DC-5       -         - at 24 V rated value       160 A         - at 440 V rated value       0.65 A         - at 440 V rated value       0.37 A         - with 3 current paths in series at DC-3 at DC-5       -         - at 400 V rated value       0.37 A         - with 3 current paths in series at DC-3 at DC-5       -         - at 420 V rated value       160 A	— at 24 V rated value	160 A
- at 440 V rated value       11.5 A         - at 600 V rated value       4 A         Operating current       -         • at 1 current path at DC-3 at DC-5       -         - at 24 V rated value       160 A         - at 110 V rated value       2.5 A         - at 220 V rated value       0.6 A         - at 440 V rated value       0.17 A         - at 600 V rated value       0.12 A         • with 2 current paths in series at DC-3 at DC-5       -         - at 440 V rated value       0.60 A         - at 440 V rated value       0.6 A         - at 440 V rated value       0.6 A         - at 440 V rated value       0.12 A         - at 600 V rated value       160 A         - at 220 V rated value       160 A         - at 220 V rated value       160 A         - at 410 V rated value       160 A         - at 420 V rated value       0.65 A         - at 440 V rated value       0.65 A         - at 600 V rated value       0.37 A         • with 3 current paths in series at DC-3 at DC-5       -         - at 24 V rated value       160 A	— at 110 V rated value	160 A
at 600 V rated value4 AOperating current-• at 1 current path at DC-3 at DC-5 at 24 V rated value160 A at 110 V rated value0.6 A at 220 V rated value0.17 A at 600 V rated value0.12 A• at 600 V rated value160 A at 24 V rated value0.12 A at 24 V rated value0.12 A• with 2 current paths in series at DC-3 at DC-5 at 24 V rated value160 A at 24 V rated value0.65 A at 440 V rated value0.65 A at 600 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value160 A	— at 220 V rated value	160 A
Operating currentImage: constraint of the end of the	— at 440 V rated value	11.5 A
<ul> <li>at 1 current path at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>0.6 A</li> <li>at 440 V rated value</li> <li>0.17 A</li> <li>at 600 V rated value</li> <li>0.12 A</li> </ul> • with 2 current paths in series at DC-3 at DC-5 <ul> <li>at 24 V rated value</li> <li>160 A</li> <li>at 110 V rated value</li> <li>160 A</li> <li>at 220 V rated value</li> <li>0.6 A</li> </ul> • with 2 current paths in series at DC-3 at DC-5 <ul> <li>at 24 V rated value</li> <li>0.65 A</li> <li>at 440 V rated value</li> <li>0.65 A</li> <li>at 600 V rated value</li> <li>0.37 A</li> </ul> • with 3 current paths in series at DC-3 at DC-5 <ul> <li>at 24 V rated value</li> <li>160 A</li> </ul>	— at 600 V rated value	4 A
- at 24 V rated value160 A- at 110 V rated value2.5 A- at 220 V rated value0.6 A- at 440 V rated value0.17 A- at 600 V rated value0.12 A• with 2 current paths in series at DC-3 at DC-5 at 24 V rated value160 A- at 110 V rated value160 A- at 220 V rated value0.65 A- at 440 V rated value0.65 A- at 440 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value160 A	Operating current	
- at 110 V rated value2.5 A- at 220 V rated value0.6 A- at 440 V rated value0.17 A- at 600 V rated value0.12 A• with 2 current paths in series at DC-3 at DC-5 at 24 V rated value160 A- at 110 V rated value160 A- at 440 V rated value0.65 A- at 600 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value160 A	<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
- at 220 V rated value0.6 A- at 440 V rated value0.17 A- at 600 V rated value0.12 A• with 2 current paths in series at DC-3 at DC-5 at 24 V rated value160 A- at 110 V rated value160 A- at 220 V rated value0.65 A- at 600 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value160 A	— at 24 V rated value	160 A
at 440 V rated value       0.17 A         at 600 V rated value       0.12 A         • with 2 current paths in series at DC-3 at DC-5       -         at 24 V rated value       160 A         at 110 V rated value       160 A         at 220 V rated value       0.65 A         at 600 V rated value       0.65 A         at 600 V rated value       0.37 A         at 24 V rated value       160 A	— at 110 V rated value	2.5 A
at 600 V rated value0.12 A• with 2 current paths in series at DC-3 at DC-5 at 24 V rated value160 A at 110 V rated value160 A at 220 V rated value2.5 A at 440 V rated value0.65 A at 600 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value160 A	— at 220 V rated value	0.6 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 24 V rated value</li> <li>160 A</li> <li>at 110 V rated value</li> <li>160 A</li> <li>at 220 V rated value</li> <li>2.5 A</li> <li>at 440 V rated value</li> <li>0.65 A</li> <li>at 600 V rated value</li> <li>0.37 A</li> </ul>	— at 440 V rated value	0.17 A
- at 24 V rated value       160 A         - at 110 V rated value       160 A         - at 220 V rated value       2.5 A         - at 440 V rated value       0.65 A         - at 600 V rated value       0.37 A         • with 3 current paths in series at DC-3 at DC-5       160 A         - at 24 V rated value       160 A	— at 600 V rated value	0.12 A
- at 110 V rated value160 A- at 220 V rated value2.5 A- at 440 V rated value0.65 A- at 600 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5160 A	<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
at 220 V rated value2.5 A at 440 V rated value0.65 A at 600 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5	— at 24 V rated value	160 A
- at 440 V rated value0.65 A- at 600 V rated value0.37 A• with 3 current paths in series at DC-3 at DC-5- at 24 V rated value160 A	— at 110 V rated value	160 A
- at 600 V rated value     0.37 A       • with 3 current paths in series at DC-3 at DC-5     - at 24 V rated value       160 A	— at 220 V rated value	2.5 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>— at 24 V rated value</li> <li>160 A</li> </ul>	— at 440 V rated value	0.65 A
— at 24 V rated value 160 A	— at 600 V rated value	0.37 A
	<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
- at 110 V rated value 160 A	— at 24 V rated value	160 A
	— at 110 V rated value	160 A

— at 220 V rated value	160 A
— at 440 V rated value	1.4 A
— at 600 V rated value	0.75 A
Operating power	
● at AC-1	
— at 230 V at 60 °C rated value	53 kW
— at 400 V rated value	92 kW
— at 400 V at 60 °C rated value	92 kW
— at 690 V rated value	159 kW
— at 690 V at 60 °C rated value	159 kW
— at 1000 V at 60 °C rated value	131 kW
• at AC-2 at 400 V rated value	55 kW
• at AC-3	
— at 230 V rated value	37 kW
— at 400 V rated value	55 kW
— at 500 V rated value	75 kW
— at 690 V rated value	110 kW
— at 1000 V rated value	75 kW
Operating power for approx. 200000 operating cycles	
at AC-4	
• at 400 V rated value	29 kW
• at 690 V rated value	48 kW
Thermal short-time current limited to 10 s	1 100 A
Power loss [W] at AC-3 at 400 V for rated value of	7 W
the operating current per conductor No-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
Operating frequency	
• at AC-1 maximum	800 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	130 1/h
Control circuit/ Control	
Type of voltage of the control supply voltage	AC/DC
Control supply voltage at AC	24 27.2.1/
• at 50 Hz rated value	21 27.3 V
at 60 Hz rated value	21 27.3 V
Control supply voltage at DC	21 27.3 V
rated value	21 21.3 V
Operating range factor control supply voltage rated value of magnet coil at AC	

● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of magnet coil at AC	
● at 50 Hz	280 V·A
Inductive power factor with closing power of the coil	
● at 50 Hz	0.8
Apparent holding power of magnet coil at AC	
● at 50 Hz	4.4 V·A
Inductive power factor with the holding power of the	
coil	
• at 50 Hz	0.5
Closing power of magnet coil at DC	320 W
Holding power of magnet coil at DC	2.8 W
Closing delay	
• at AC	35 75 ms
• at DC	35 75 ms
Opening delay	
● at AC	80 90 ms
● at DC	80 90 ms
Arcing time	10 15 ms
Auxiliary circuit	
Number of NC contacts	
<ul> <li>for auxiliary contacts</li> </ul>	
— instantaneous contact	2
- Instantaneous contact	2
Number of NO contacts	2
	2
Number of NO contacts	2
Number of NO contacts           • for auxiliary contacts	
Number of NO contacts <ul> <li>for auxiliary contacts</li> <li>instantaneous contact</li> </ul>	2
Number of NO contacts <ul> <li>for auxiliary contacts</li> <li>instantaneous contact</li> </ul> <li>Operating current at AC-12 maximum</li>	2
Number of NO contacts         • for auxiliary contacts         — instantaneous contact         Operating current at AC-12 maximum         Operating current at AC-15	2 10 A
Number of NO contacts         • for auxiliary contacts         — instantaneous contact         Operating current at AC-12 maximum         Operating current at AC-15         • at 230 V rated value	2 10 A 6 A
Number of NO contacts         • for auxiliary contacts         — instantaneous contact         Operating current at AC-12 maximum         Operating current at AC-15         • at 230 V rated value         • at 400 V rated value	2 10 A 6 A 3 A
Number of NO contacts • for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value	2 10 A 6 A 3 A 2 A
Number of NO contacts • for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	2 10 A 6 A 3 A 2 A
Number of NO contacts         • for auxiliary contacts         — instantaneous contact         Operating current at AC-12 maximum         Operating current at AC-15         • at 230 V rated value         • at 400 V rated value         • at 500 V rated value         • at 690 V rated value         • at 690 V rated value	2 10 A 6 A 3 A 2 A 1 A
Number of NO contacts • for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A
Number of NO contacts         • for auxiliary contacts         — instantaneous contact         Operating current at AC-12 maximum         Operating current at AC-15         • at 230 V rated value         • at 400 V rated value         • at 500 V rated value         • at 690 V rated value         • at 690 V rated value         • at 400 V rated value         • at 690 V rated value         • at 690 V rated value         • at 48 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A
Number of NO contacts         • for auxiliary contacts         — instantaneous contact         Operating current at AC-12 maximum         Operating current at AC-15         • at 230 V rated value         • at 400 V rated value         • at 500 V rated value         • at 690 V rated value         • at 24 V rated value         • at 24 V rated value         • at 48 V rated value         • at 60 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A
Number of NO contacts • for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 40 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A
Number of NO contacts         • for auxiliary contacts         — instantaneous contact         Operating current at AC-12 maximum         Operating current at AC-15         • at 230 V rated value         • at 400 V rated value         • at 500 V rated value         • at 690 V rated value         • at 24 V rated value         • at 24 V rated value         • at 48 V rated value         • at 40 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 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)

	atings
SA r	atings

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	124 A
• at 600 V rated value	125 A
Yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 230 V rated value	25 hp
<ul> <li>for three-phase AC motor</li> </ul>	
— at 200/208 V rated value	40 hp
— at 220/230 V rated value	50 hp
— at 460/480 V rated value	100 hp
— at 575/600 V rated value	125 hp
Contact rating of auxiliary contacts according to UL	A600 / Q600

Short-circuit protection			
Design of the fuse link			
<ul> <li>for short-circuit protection of the main circuit</li> </ul>			
— with type of coordination 1 required	Fuse gG: 355 A		
— with type of assignment 2 required	Fuse gG: 315 A		
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gG: 10 A		
Installation/ mounting/ dimensions			
Mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface		
Mounting type	screw fixing		
<ul> <li>Side-by-side mounting</li> </ul>	Yes		
Height	172 mm		
Width	120 mm		
Depth	170 mm		
Required spacing			
<ul> <li>for grounded parts</li> </ul>			
— 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>	screw-type terminals
Type of connectable conductor cross-sections	
<ul> <li>for main contacts</li> </ul>	
— stranded	max. 2x 70 mm <sup>2</sup>
- finely stranded with core end processing	max. 1x 50, 1x 70 mm <sup>2</sup>
- finely stranded without core end	max. 1x 50, 1x 70 mm <sup>2</sup>
processing	
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x 1/0
Type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
<ul> <li>— finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>at AWG conductors for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 1x 12
Safety related data	
Product function	
<ul> <li>Mirror contact acc. to IEC 60947-4-1</li> </ul>	Yes
<ul> <li>positively driven operation acc. to IEC 60947-5-</li> <li>1</li> </ul>	No
Protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529
Certificates/approvals	

General Product	Approval			Functional Safety/Safety of Machinery	Declaration of Conformity
CCC	CSA		EHC	Type Examination Certificate	EG-Konf.
Test Certificates		Marine / Shippi	ng		
Type Test Certificates/Test Report	Special Test Certificate	ABS	RMRS	J. DINV DINV	DNVGLCOM/AF
other					
Environmental Confirmations	Miscellaneous	Confirmation			

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

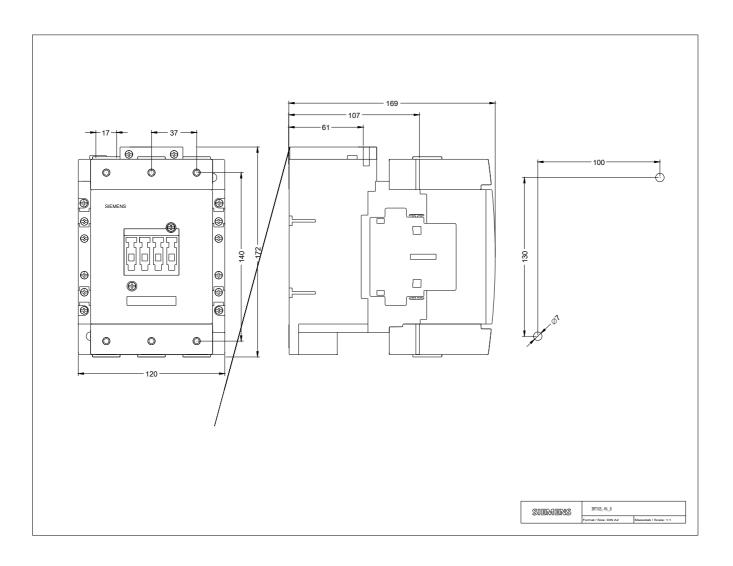
Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1054-1NB36

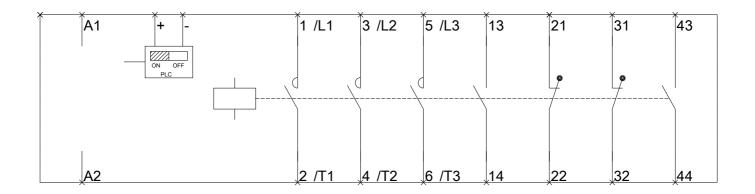
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1054-1NB36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-1NB36

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1054-1NB36&lang=en





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