# **SIEMENS**

Data sheet 3RT2027-1BB44

CONTACTOR, AC-3, 15KW/400V, 2NO+2NC, DC 24V, 3-POLE, SZ S0 SCREW TERMINAL REMOVABLE AUX. SWITCH



product brandname	SIRIUS
Product designation	Power contactor
Product type designation	3RT2

General technical data	
Size of contactor	S0
Product extension	
<ul> <li>function module for communication</li> </ul>	No
<ul> <li>Auxiliary switch</li> </ul>	No
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>between coil and main contacts acc. to EN</li> </ul>	400 V
60947-1	
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Shock resistance at rectangular impulse	

	10 /5 75 /40
• at DC	10g / 5 ms, 7,5g / 10 ms
Shock resistance with sine pulse	45 /5 40 /40
• at DC	15g / 5 ms, 10g / 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	
<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
Number of NC contacts for main contacts	0
Operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	50 A
• at AC-1	
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	50 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	42 A
• at AC-2 at 400 V rated value	32 A
• at AC-3	
— at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
Connectable conductor cross-section in main circuit at AC-1	
at 60 °C minimum permissible	10 mm²
• at 40 °C minimum permissible	10 mm²
Operating current for approx. 200000 operating cycles at AC-4	

at 400 V rated valueat 690 V rated value

• at 1 current path at DC-1

Operating current

12 A

12 A

— at 220 V rated value	.5 A A
	A
— at 440 V rated value 0.	
	.4 A
— at 600 V rated value 0.2	.25 A
• with 2 current paths in series at DC-1	
— at 24 V rated value 35	5 A
— at 110 V rated value 35	5 A
— at 220 V rated value 5 A	A
— at 440 V rated value	A
— at 600 V rated value 0.8	.8 A
• with 3 current paths in series at DC-1	
— at 24 V rated value 35	5 A
— at 110 V rated value 35	5 A
— at 220 V rated value 35	5 A
— at 440 V rated value 2.5	.9 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 20	0 A
— at 110 V rated value 2.5	.5 A
— at 220 V rated value	A
— at 440 V rated value 0.0	.09 A
— at 600 V rated value 0.0	.06 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V rated value	5 A
— at 220 V rated value 3 /	A
— at 24 V rated value 35	5 A
— at 440 V rated value 0.2	.27 A
— at 600 V rated value 0.	.16 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value 35	5 A
— at 220 V rated value	0 A
— at 24 V rated value 35	5 A
— at 440 V rated value 0.6	.6 A
— at 600 V rated value 0.6	.6 A
Operating power	
• at AC-1	
— at 230 V rated value	6 kW
— at 230 V at 60 °C rated value	5.5 kW
— at 400 V rated value 28	8 kW

— at 400 V at 60 °C rated value	27.5 kW
— at 690 V rated value	48 kW
— at 690 V at 60 °C rated value	47.5 kW
• at AC-2 at 400 V rated value	15 kW
● at AC-3	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 690 V rated value	18.5 kW
Operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	6 kW
at 690 V rated value	10.3 kW
Thermal short-time current limited to 10 s	260 A
Power loss [W] at AC-3 at 400 V for rated value of	2.7 W
the operating current per conductor	
No-load switching frequency	
• at DC	1 500 1/h
Operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
• rated value	24 V
Closing power of magnet coil at DC	5.9 W
Holding power of magnet coil at DC	5.9 W
Closing delay	
• at DC	50 170 ms
Opening delay	45 47 5
• at DC	15 17.5 ms
Arcing time	10 10 ms
Residual current of the electronics for control with signal <0>	
at AC at 230 V maximum permissible	7 mA
at DC at 24 V maximum permissible	16 mA
Auxiliary circuit	
Number of NC contacts	
• for auxiliary contacts	
	2

	• for auxiliary contacts	
Operating current at AC-15	— instantaneous contact	2
• at 230 V rated value • at 400 V rated value • at 600 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 100 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • 5 hp • for three-phase AC motor • at 100 V rated value • 10 hp • at 220/230 V rated value • 10 hp • at 480/480 V rated value • 25 hp • Contact rating of auxiliary contacts according to UL  Short-circuit protection	Operating current at AC-12 maximum	10 A
• at 400 V rated value • at 500 V rated value • at 500 V rated value • at 690 V rated value  1 A  Operating current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 60 V rated value • at 125 V rated value • at 125 V rated value • at 125 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 160 V rated value • at 160 V rated value • at 160 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 480 V rated value • at 230 V rated value • for three-phase AC motor  — at 2700/208 V rated value • for three-phase AC motor  — at 2700/208 V rated value • for three-phase AC motor  — at 2700/208 V rated value • for three-phase AC motor  — at 2700/208 V rated value • for three-phase AC motor  — at 480/480 V rated value • for three-phase AC motor  — at 480/480 V rated value  — at 675/600 V rated value  — at 675/600 V rated value  20 hp  — at 675/600 V rated value  20 hp  Contact rating of auxiliary contacts according to UL  Short-circuit protection	Operating current at AC-15	
• at 500 V rated value 2 A • at 690 V rated value 1 A  Operating current at DC-12 • at 24 V rated value 6 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 1 A • at 220 V rated value 1 A • at 800 V rated value 0.15 A  Operating current at DC-13 • at 24 V rated value 6 A • at 80 V rated value 1 A • at 800 V rated value 2 A • at 80 V rated value 5 A • at 80 V rated value 1 A • at 80 V rated value 2 A • at 110 V rated value 1 A • at 80 V rated value 2 A • at 110 V rated value 2 A • at 110 V rated value 1 A • at 125 V rated value 2 A • at 100 V rated value 1 A • at 100 V rated value 2 A • at 600 V rated value 2 A • at 600 V rated value 2 A • at 600 V rated value 2 A • at 100 V rated value 2 A • at 220 V rated value 3 A • at 220 V rated value 3 A • at 220 V rated value 3 A • at 220 V rated value 4 A • at 220 V rated value 5 A • at 300 V rated value 2 A • at 300 V rated value 2 A • at 400 V rated value 2 A • at 400 V rated value 2 A • at 400 V rated value 2 A • at 600 V rated value 2 A • at 100 V rated value 2 A • at 100 V rated value 3 A • at 200 V rated value 4 A • at 200 V rated value 5 A • at 200/208 V rated value 5 A • at 300 V rated value 10 A • at 200/208 V rated value 20 A • at 460/480 V rated value 20 A • at 675/600 V rated value 20 A • at 600 V G600	• at 230 V rated value	6 A
• at 690 V rated value 10 A  Operating current at DC-12  • at 24 V rated value 6 A • at 48 V rated value 6 A • at 48 V rated value 3 A • at 100 V rated value 3 A • at 110 V rated value 11 A • at 220 V rated value 2 A • at 200 V rated value 11 A • at 600 V rated value 2 A • at 200 V rated value 5 A • at 600 V rated value 2 A • at 600 V rated value 5 A • at 600 V rated value 6 A • at 48 V rated value 9 A • at 42 V rated value 9 A • at 42 V rated value 9 A • at 45 V rated value 9 A • at 60 V rated value 9 A • at 125 V rated value 9 A • at 125 V rated value 9 A • at 125 V rated value 9 A • at 220 V rated value 9 A • at 220 V rated value 9 A • at 600 V rated V r	• at 400 V rated value	3 A
Operating current at DC-12  • at 24 V rated value	• at 500 V rated value	2 A
• at 24 V rated value	• at 690 V rated value	1 A
• at 48 V rated value	Operating current at DC-12	
• at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 60 V rated value • at 42 V rated value • at 44 V rated value • at 45 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 800 V rated value • at 600 V rated value • at 575/600 V rated value • at 257 bp  Contact rating of auxiliary contacts according to UL  Short-circuit protection	• at 24 V rated value	10 A
• at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 320 V rated value • at 480 V rated value • at 600 V rated value • at 220 V rated value • at 110/120 V rated value  — at 200/208 V rated value  — at 200/208 V rated value — at 200/208 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — at 600 V 6000  Short-circuit protection	• at 48 V rated value	6 A
• at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value  • at 600 V rated value  • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 200 V rated value • at 600 V rated value • at 27 A  Yielded mechanical performance [hp] • for single-phase AC motor  — at 110/120 V rated value • for three-phase AC motor  — at 200/208 V rated value • for three-phase AC motor  — at 200/208 V rated value — at 200/208 V rated value — at 200/408 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value  — at 575/600 V rated value  — at 575/600 V rated value	• at 60 V rated value	6 A
at 220 V rated value     at 600 V rated value     0.15 A  Operating current at DC-13     at 24 V rated value     at 48 V rated value     at 60 V rated value     at 60 V rated value     at 110 V rated value     at 110 V rated value     at 125 V rated value     at 220 V rated value     at 600 V rated value     at 7 A  VIL/CSA ratings  Full-load current (FLA) for three-phase AC motor     at 480 V rated value     at 600 V rated value     at 600 V rated value     at 600 V rated value     at 220 V rated value     at 230 V rated value     at 230 V rated value     at 230 V rated value     at 220/230 V rated value     at 220/230 V rated value     at 460/480 V rated value     at 460/480 V rated value     at 460/480 V rated value     at 575/600 V rated value     A600 / Q600  Short-circuit protection	• at 110 V rated value	3 A
• at 600 V rated value  Operating current at DC-13  • at 24 V rated value  • at 48 V rated value  • at 60 V rated value  • at 110 V rated value  • at 1125 V rated value  • at 220 V rated value  • at 600 V rated value  • at 480 V rated value  • at 480 V rated value  • at 600 V rated value  • at 600 V rated value  • at 600 V rated value  • for single-phase AC motor  — at 110/120 V rated value  • for three-phase AC motor  — at 230 V rated value  • for three-phase AC motor  — at 200/208 V rated value  • for three-phase AC motor  — at 200/208 V rated value  • for three-phase AC motor  — at 200/208 V rated value  • for three-phase AC motor  — at 575/600 V rated value  — A600 / Q600  Short-circuit protection	• at 125 V rated value	2 A
Operating current at DC-13  • at 24 V rated value 6 A  • at 48 V rated value 2 A  • at 60 V rated value 1 A  • at 110 V rated value 2 A  • at 110 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 27 A  Ylelded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value 2 hp  — at 230 V rated value 5 hp  • for three-phase AC motor  — at 200/208 V rated value 10 hp  — at 220/230 V rated value 20 hp  — at 460/480 V rated value 20 hp  — at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL  Short-circuit protection	• at 220 V rated value	1 A
at 24 V rated value     at 48 V rated value     at 60 V rated value     at 110 V rated value     at 110 V rated value     at 220 V rated value     at 220 V rated value     at 600 V rated value     at 480 V rated value     at 600 V rated value     at 7 A  Yielded mechanical performance [hp]     for single-phase AC motor	• at 600 V rated value	0.15 A
at 48 V rated value     at 60 V rated value     at 110 V rated value     at 110 V rated value     at 125 V rated value     at 220 V rated value     at 600 V rated value     at 480 V rated value     at 480 V rated value     at 480 V rated value     at 600 V rated value     at 200 V rated value     at 460 V rated value     at 200 V rated value     at 460 V rated value     at 575/600 V rated value     at 575/600 V rated value     at 575/600 V rated value     A600 / Q600  Short-circuit protection	Operating current at DC-13	
* at 60 V rated value     * at 110 V rated value     * at 125 V rated value     * at 220 V rated value     * at 220 V rated value     * at 600 V rated value      * at 480 V rated value     * at 600 V rated value     * at 7 A  Yielded mechanical performance [hp]      * for single-phase AC motor     * at 110/120 V rated value     * at 230 V rated value     * at 230 V rated value     * for three-phase AC motor     * at 220/230 V rated value     * at 220/230 V rated value     * at 460/480 V rated value     * at 460/480 V rated value     * at 575/600 V rated value     * at 575/600 V rated value     * at 600 / Q600  Short-circuit protection	• at 24 V rated value	6 A
at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value  at 600 V rated value  outlier of three-phase AC motor at 100 V rated value at 600 V rated value bfor single-phase AC motor at 110/120 V rated value at 20 V rated value at 20 V rated value at 20 V rated value bfor three-phase AC motor at 200/208 V rated value at 460/480 V rated value at 575/600 V rated value A600 / Q600  Short-circuit protection	• at 48 V rated value	2 A
at 125 V rated value at 220 V rated value at 600 V rated value  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 at 600 V rated value at 600 V rated value for single-phase AC motor  - at 110/120 V rated value - at 230 V rated value for three-phase AC motor - at 200/208 V rated value at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value	• at 60 V rated value	2 A
at 220 V rated value 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 at 600 V rated value for single-phase AC motor  - at 110/120 V rated value - at 230 V rated value for three-phase AC motor - at 230 V rated value - at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 460/480 V rated value - at 575/600 V rated value - at 600 / Q600  Short-circuit protection	• at 110 V rated value	1 A
at 600 V rated value  Contact reliability of auxiliary contacts  1 faulty switching per 100 million (17 V, 1 mA)  UL/CSA ratings  Full-load current (FLA) for three-phase AC motor  at 480 V rated value  at 600 V rated value  for single-phase AC motor  at 110/120 V rated value  for three-phase AC motor  at 230 V rated value  for three-phase AC motor  at 200/208 V rated value  at 200/208 V rated value  at 220/230 V rated value  at 460/480 V rated value  at 460/480 V rated value  at 575/600 V rated value  Contact rating of auxiliary contacts according to UL  Short-circuit protection	• at 125 V rated value	0.9 A
Contact reliability of auxiliary contacts  1 faulty switching per 100 million (17 V, 1 mA)  UL/CSA ratings  Full-load current (FLA) for three-phase AC motor  • at 480 V rated value  • at 600 V rated value  27 A  Yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value  2 hp  — at 230 V rated value  • for three-phase AC motor  — at 200/208 V rated value  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  25 hp  Contact rating of auxiliary contacts according to UL  Short-circuit protection	• at 220 V rated value	0.3 A
Full-load current (FLA) for three-phase AC motor  • at 480 V rated value 27 A  • at 600 V rated value 27 A  Yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value 2 hp — at 230 V rated value 5 hp  • for three-phase AC motor  — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 20 hp — at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL A600 / Q600	• at 600 V rated value	0.1 A
Full-load current (FLA) for three-phase AC motor  • at 480 V rated value  • at 600 V rated value  27 A  Yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value  — at 230 V rated value  • for three-phase AC motor  — at 200/208 V rated value  • at 220/230 V rated value  — at 460/480 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  Contact rating of auxiliary contacts according to UL  Short-circuit protection	Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
<ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>27 A</li> <li>Yielded mechanical performance [hp]</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> <li>for three-phase AC motor</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>at 460/480 V rated value</li> <li>at 5 hp</li> <li>at 460/480 V rated value</li> <li>at 575/600 V rated value</li> <li>at 575/600 V rated value</li> <li>A600 / Q600</li> <li>Short-circuit protection</li> </ul>	UL/CSA ratings	
at 600 V rated value  Yielded mechanical performance [hp]  for single-phase AC motor  — at 110/120 V rated value — at 230 V rated value  for three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value  Contact rating of auxiliary contacts according to UL  Short-circuit protection	Full-load current (FLA) for three-phase AC motor	
Yielded mechanical performance [hp]  ● for single-phase AC motor  — at 110/120 V rated value 2 hp  — at 230 V rated value 5 hp  ● for three-phase AC motor  — at 200/208 V rated value 10 hp  — at 220/230 V rated value 10 hp  — at 460/480 V rated value 20 hp  — at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL A600 / Q600	● at 480 V rated value	27 A
<ul> <li>for single-phase AC motor  — at 110/120 V rated value 2 hp  — at 230 V rated value 5 hp </li> <li>for three-phase AC motor  — at 200/208 V rated value 10 hp  — at 220/230 V rated value 10 hp  — at 460/480 V rated value 20 hp  — at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL A600 / Q600</li> </ul>	● at 600 V rated value	27 A
- at 110/120 V rated value 2 hp  - at 230 V rated value 5 hp  ● for three-phase AC motor  - at 200/208 V rated value 10 hp  - at 220/230 V rated value 10 hp  - at 460/480 V rated value 20 hp  - at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL A600 / Q600	Yielded mechanical performance [hp]	
<ul> <li>— at 230 V rated value</li> <li>● for three-phase AC motor</li> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> <li>Z5 hp</li> </ul> Contact rating of auxiliary contacts according to UL Short-circuit protection 5 hp 6 hp 6 A600 / Q600 Short-circuit protection	<ul> <li>for single-phase AC motor</li> </ul>	
● for three-phase AC motor  — at 200/208 V rated value 10 hp  — at 220/230 V rated value 20 hp  — at 460/480 V rated value 25 hp  Contact rating of auxiliary contacts according to UL A600 / Q600  Short-circuit protection	— at 110/120 V rated value	2 hp
- at 200/208 V rated value 10 hp 10 hp 10 hp at 220/230 V rated value 20 hp at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL  Short-circuit protection	— at 230 V rated value	5 hp
- at 220/230 V rated value - at 460/480 V rated value 20 hp - at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL  Short-circuit protection	• for three-phase AC motor	
- at 460/480 V rated value 20 hp - at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL A600 / Q600  Short-circuit protection	— at 200/208 V rated value	10 hp
— at 575/600 V rated value 25 hp  Contact rating of auxiliary contacts according to UL A600 / Q600  Short-circuit protection	— at 220/230 V rated value	10 hp
Contact rating of auxiliary contacts according to UL  A600 / Q600  Short-circuit protection	— at 460/480 V rated value	20 hp
Short-circuit protection	— at 575/600 V rated value	25 hp
<u> </u>	Contact rating of auxiliary contacts according to UL	A600 / Q600
Design of the fuse link	Short-circuit protection	
	Design of the fuse link	

• for short-circuit protection of the main circuit

— with type of coordination 1 required

— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 125 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A fuse gG: 10 A

nstallation/ 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 and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Side-by-side mounting	Yes
Height	85 mm
Width	45 mm
Depth	151 mm
Required spacing	
<ul><li>for grounded parts</li></ul>	
— at the side	6 mm
• for live parts	
— at the side	6 mm

Connections/Terminals	
Type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
— single or multi-stranded	2x (1 2,5 mm²), 2x (2,5 10 mm²)
— finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (16 12), 2x (14 8)
Type of connectable conductor cross-sections	
for auxiliary contacts	
<ul> <li>single or multi-stranded</li> </ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• at AWG conductors for auxiliary contacts	2x (20 16), 2x (18 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 31920</li> </ul>	40 %
• with high demand rate acc. to SN 31920	73 %

Failure rate [FIT]	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	100 FIT
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></ul>	No
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Protection against electrical shock	finger-safe

#### Certificates/approvals

## **General Product Approval**

**EMC** 











Functional
Safety/Safety
of Machinery

Declaration of Conformity

**Test Certificates** 

**Shipping Approval** 

Baumusterbescheini gung



Typprüfbescheinigu ng/Werkszeugnis

spezielle Prüfbescheinigunge n

ON SHIPPIN



## **Shipping Approval**

other



GL









Umweltbestätigung

### other

Bestätigungen



#### Further information

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

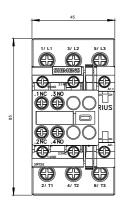
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2027-1BB44

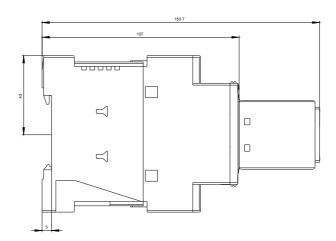
Cax online generator

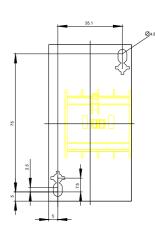
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1BB44

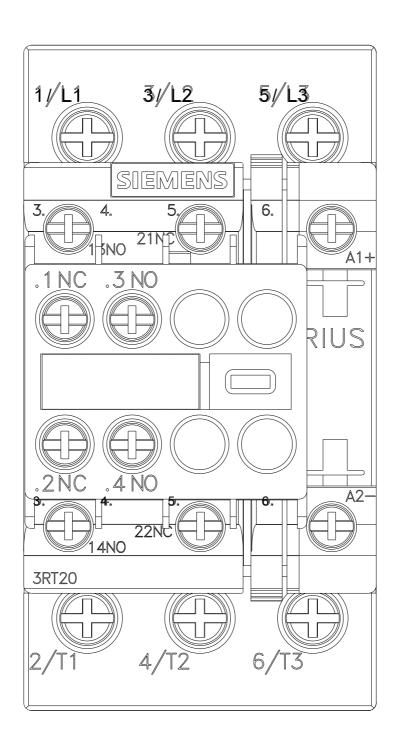
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1BB44

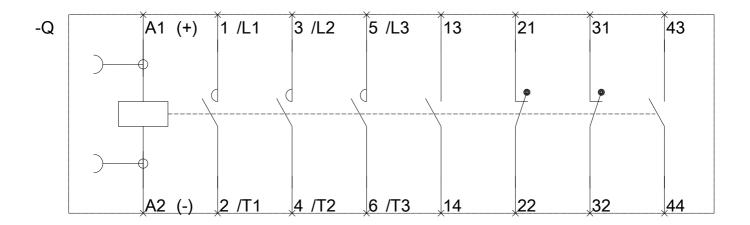
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2027-1BB44&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2027-1BB44&lang=en</a>











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