SIEMENS

Data sheet 3RT2038-1NB30



CONTACTOR,AC3:37KW/400V, 1NO+1NC, 20-33V AC/DC, WITH VARISTOR, 3-POLE, SIZE S2, SCREW TERMINAL

Figure similar

product brand name	SIRIUS
Product designation	3RT2 contactor

General technical data:	
Product expansion function module for	No
communication	
Insulation voltage	
Rated value	690 V
maximum permissible voltage for safe isolation	400 V
between coil and main contacts acc. to EN 60947-1	
Degree of pollution	3
Shock resistance	
at rectangular impulse	
— with AC	7.7g / 5 ms, 4.5g / 10 ms
— for DC	7.7g / 5 ms, 4.5g / 10 ms
• with sine pulse	
— with AC	12g / 5 ms, 7g / 10 ms
— for DC	12g / 5 ms, 7g / 10 ms
Surge voltage resistance Rated value	6 kV
Mechanical service life (switching cycles)	
 of the contactor typical 	10 000 000
 of the contactor with added electronics- 	5 000 000
compatible auxiliary switch block typical	
 of the contactor with added auxiliary switch 	10 000 000
block typical	
Thermal short-time current restricted to 10 s	640 A

Protection class IP	JD00
• on the front	IP00
of the terminal	IP00
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q
Main circuit:	
Number of poles for main current circuit	3
Number of NC contacts for main contacts	0
Number of NO contacts for main contacts	3
Operating voltage	
 at AC-3 Rated value maximum 	690 V
Operating current	
• at AC-1	
 — at 400 V at ambient temperature 40 °C Rated value 	90 A
 up to 690 V at ambient temperature 40 °C Rated value 	90 A
— up to 690 V at ambient temperature 60 °C Rated value	80 A
• at AC-2 at 400 V Rated value	80 A
• at AC-3	
— at 400 V Rated value	80 A
— at 500 V Rated value	80 A
— at 690 V Rated value	58 A
• at AC-4 at 400 V Rated value	55 A
Operating current with 1 current path	
• at DC-1	
— at 24 V Rated value	55 A
— at 110 V Rated value	4.5 A
— at 220 V Rated value	1 A
— at 440 V Rated value	0.4 A
— at 600 V Rated value	0.25 A
• at DC-3 at DC-5	
— at 24 V Rated value	35 A
— at 110 V Rated value	2.5 A
— at 220 V Rated value	1 A
— at 440 V Rated value	0.1 A
— at 600 V Rated value	0.06 A
Operating current with 2 current paths in series	

• at DC-1

— at 24 V Rated value

55 A

	— at 110 V Rated value	45 A
- at 600 V Rated value • at DC-3 at DC-5 - at 110 V Rated value - at 220 V Rated value - at 24 V Rated value - at 240 V Rated value - at 600 V Rated value - at 700 V Rated value - at 700 V Rated value - at 110 V Rated value - at 120 V Rated value - at 110 V Rated value - at 120 V Rated value - at 24 V Rated value - at 25 A - at 27 V Rated value - at 400 V Rated value - at 400 V Rated value - at 200 V Rated value - at 600 V Rated value - at 400 V at 60 °C Rated value - at 600 V Rated	— at 220 V Rated value	5 A
at 10 V Rated value	— at 440 V Rated value	1 A
- at 110 V Rated value 5 A - at 220 V Rated value 5 A - at 24 V Rated value 0.27 A - at 440 V Rated value 0.16 A Operating ourrent with 3 current paths in series • at DC-1 - at 24 V Rated value 55 A - at 110 V Rated value 55 A - at 120 V Rated value 55 A - at 120 V Rated value 55 A - at 110 V Rated value 55 A - at 120 V Rated value 45 A - at 220 V Rated value 2.9 A - at 600 V Rated value 1.4 A • at DC-3 at DC-5 - at 110 V Rated value 55 A - at 120 V Rated value 55 A - at 120 V Rated value 55 A - at 140 V Rated value 55 A - at 140 V Rated value 55 A - at 140 V Rated value 55 A - at 220 V Rated value 55 A - at 220 V Rated value 55 A - at 24 V Rated value 55 A - at 440 V Rated value 65 A - at 230 V Rated value 9.6 A - at 230 V Rated value 9.6 A - at 400 V Rated value 9.6 A - at 400 V Rated value 9.6 A - at 400 V Rated value 9.8 kW - at 690 V Rated value 85 kW Operating power • at AC-1 - at 230 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 15.8 kW - at 690 V Rated value 21.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-3 maximum 700 1/h • at AC-4 maximum 550 1/h • at AC-3 maximum 550 1/h • at AC-4 maximum 150 1/h Noload switching frequency • with AC	— at 600 V Rated value	0.8 A
- at 220 V Rated value 55 A - at 24 V Rated value 55 A - at 440 V Rated value 0.27 A - at 600 V Rated value 0.16 A Operating current with 3 current paths in series • at DC-1 - at 24 V Rated value 55 A - at 110 V Rated value 55 A - at 120 V Rated value 45 A - at 220 V Rated value 2.9 A - at 600 V Rated value 1.4 A • at DC-3 at DC-5 - at 110 V Rated value 55 A - at 120 V Rated value 55 A - at 440 V Rated value 55 A - at 440 V Rated value 1.4 A • at DC-3 at DC-5 - at 110 V Rated value 55 A - at 220 V Rated value 55 A - at 24 V Rated value 55 A - at 24 V Rated value 65 A - at 260 V Rated value 9.6 A - at 600 V Rated value 9.6 A - at 600 V Rated value 9.6 A - at 600 V Rated value 9.6 A Operating power • at AC-1 - at 230 V at 60 °C Rated value 49 kW - at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 15.8 kW • at 690 V Rated value 21.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-4 maximum 700 1/h • at AC-2 maximum 350 1/h • at AC-3 maximum 1500 1/h • at AC-3 maximum 1500 1/h • at AC-4 maximum 1500 1/h • at AC-5 work at AC-5 at 400 V for at 200 1/h • at AC-6 maximum 1500 1/h • at AC-7 maximum 1500 1/h • at AC-8 maximum 1500 1/h • at AC-9 maximum 1500 1/h • at AC-9 work at 200 1/h • at AC-9 maximum 1500 1/h • at AC-9 maximum 1500 1/h	• at DC-3 at DC-5	
- at 24 V Rated value	— at 110 V Rated value	25 A
- at 440 V Rated value 0.16 A Operating current with 3 current paths in series • at DC-1 - at 24 V Rated value 55 A - at 110 V Rated value 55 A - at 220 V Rated value 45 A - at 440 V Rated value 2.9 A - at 110 V Rated value 55 A - at 110 V Rated value 2.9 A - at 110 V Rated value 55 A - at 122 V Rated value 55 A - at 24 V Rated value 55 A - at 24 V Rated value 9.6 A - at 24 V Rated value 9.6 A - at 440 V Rated value 9.6 A - at 600 V Rated value 9.6 A Operating power • at AC-1 - at 230 V at 60 °C Rated value 48 kW - at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 15.8 kW • at 690 V Rated value 21.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-2 maximum 700 1/h • at AC-3 maximum 500 1/h • at AC-3 maximum 500 1/h • at AC-4 maximum 150 1/h No-load switching frequency • with AC 1500 150 160 160 160 160 160 160 160 160 160 16	— at 220 V Rated value	5 A
Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value — at 110 V Rated value — at 400 V Rated value — at 400 V Rated value — at 600 V Rated value — at 600 V Rated value — at 600 V Rated value — at 700 V Rated value — at 220 V Rated value — at 600 V Rated value — at 220 V Rated value — at 220 V Rated value — 55 A — at 110 V Rated value — 55 A — at 220 V Rated value — 55 A — at 24 V Rated value — 55 A — at 440 V Rated value — 55 A — at 440 V Rated value — at 600 V Rated value — 35 kW Operating power • at AC-1 — at 230 V at 60 °C Rated value — at 690 V Rated value — 35 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value • at 690 V Rated value • at 400 V Rated value • at 690 V Rated value • at 401 V Rated value • at 402 V Rated value • at 690 V Rated value • at 403 V Rated value • at 404 V Rated value • at 404 V Rated value • at 405 V Rated value • at 405 V Rated value • at 400 V Rated value	— at 24 V Rated value	55 A
Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value 55 A — at 110 V Rated value 45 A — at 220 V Rated value 2.9 A — at 440 V Rated value 1.4 A • at DC-3 at DC-5 55 A — at 110 V Rated value 25 A — at 220 V Rated value 55 A — at 24 V Rated value 55 A — at 440 V Rated value 0.6 A — at 440 V Rated value 0.6 A — at 400 V Rated value 49 kW — at 400 V at 60 °C Rated value 85 kW — at 400 V Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 15.8 kW • at 400 V Rated value 15.8 kW • at 400 V Rated value 21.8 kW • at 400 V Rated value 5.7 W • at AC-1 maximum 700 1/h • at AC-2 maximum 500 1/h • at AC-2 maximum 500 1/h • at AC-4 maximum 150 1/h No-load switching frequency with AC • with AC 1 500 1/h	— at 440 V Rated value	0.27 A
at 1 DC-1 — at 24 V Rated value	— at 600 V Rated value	0.16 A
- at 24 V Rated value 55 A - at 110 V Rated value 45 A - at 220 V Rated value 45 A - at 220 V Rated value 2.9 A - at 600 V Rated value 1.4 A • at DC-3 at DC-5 - at 110 V Rated value 55 A - at 220 V Rated value 55 A - at 24 V Rated value 0.6 A - at 600 V Rated value 0.6 A Operating power • at AC-1 - at 230 V at 60 °C Rated value 49 kW - at 400 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 15.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum 700 1/h • at AC-2 maximum 500 1/h • at AC-3 maximum 500 1/h • at AC-4 maximum 150 1/h No-load switching frequency • with AC 1500 1/h No-load switching frequency • with AC 1500 1/h	Operating current with 3 current paths in series	
- at 110 ∨ Rated value 55 A - at 220 ∨ Rated value 45 A - at 440 ∨ Rated value 2.9 A - at 600 ∨ Rated value 1.4 A • at DC-3 at DC-5 - at 110 ∨ Rated value 55 A - at 220 ∨ Rated value 55 A - at 220 ∨ Rated value 55 A - at 220 ∨ Rated value 55 A - at 24 ∨ Rated value 55 A - at 440 ∨ Rated value 55 A - at 440 ∨ Rated value 0.6 A Operating power • at AC-1 - at 230 ∨ at 60 °C Rated value 49 kW - at 690 ∨ Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 ∨ Rated value 15.8 kW • at 690 ∨ Rated value 21.8 kW Active power loss at AC-3 at 400 ∨ for rated value of the operating current per conductor Operating frequency • at AC-1 maximum 700 1/h • at AC-2 maximum 500 1/h • at AC-3 maximum 500 1/h • at AC-4 maximum 150 1/h No-load switching frequency • with AC 1500 1/h No-load switching frequency • with AC 1500 1/h	• at DC-1	
— at 220 V Rated value — at 440 V Rated value — at 600 V Rated value — at 600 V Rated value — at 110 V Rated value — at 220 V Rated value — at 220 V Rated value — at 440 V Rated value — at 440 V Rated value — at 600 V Rated value — at 400 V at 60 °C Rated value — at 400 V at 60 °C Rated value — at 400 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V Rated value • at 400 V Rated value • at 690 V Rated value • at 690 V Rated value • at 690 V Rated value Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-5 maximum • at AC-6 maximum • at AC-6 maximum • at AC-7 maximum • at AC-8 maximum • at AC-8 maximum • at AC-9 maximum • at	— at 24 V Rated value	55 A
- at 440 V Rated value - at 600 V Rated value • at DC-3 at DC-5 - at 110 V Rated value 55 A - at 220 V Rated value 55 A - at 24 V Rated value 55 A - at 440 V Rated value 55 A - at 4600 V Rated value 0.6 A Operating power • at AC-1 - at 230 V at 60 °C Rated value - at 400 V at 60 °C Rated value - at 690 V at 60 °C Rated value - at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 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 21.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum 150 1/h No-load switching frequency • with AC • with AC	— at 110 V Rated value	55 A
- at 600 V Rated value • at DC-3 at DC-5 — at 110 V Rated value 55 A — at 220 V Rated value 55 A — at 24 V Rated value 55 A — at 440 V Rated value 0.6 A Operating power • at AC-1 — at 230 V at 60 °C Rated value — at 400 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value 15.8 kW 700 1/h • at AC-2 maximum 500 1/h • at AC-3 maximum • at AC-4 maximum 150 1/h No-load switching frequency • with AC 1 500 1/h	— at 220 V Rated value	45 A
at DC-3 at DC-5 — at 110 V Rated value — at 220 V Rated value — at 220 V Rated value — at 440 V Rated value — at 600 V Rated value — at 600 V Rated value — at AC-1 — at 230 V at 60 °C Rated value — at 400 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 400 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value St kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value	— at 440 V Rated value	2.9 A
- at 110 V Rated value 55 A - at 220 V Rated value 25 A - at 24 V Rated value 55 A - at 440 V Rated value 0.6 A - at 600 V Rated value 0.6 A Operating power • at AC-1 - at 230 V at 60 °C Rated value 28 kW - at 400 V at 60 °C Rated value 49 kW - at 690 V at 60 °C Rated value 35 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 15.8 kW • at 690 V Rated value 21.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum 700 1/h • at AC-2 maximum 500 1/h • at AC-4 maximum 150 1/h No-load switching frequency • with AC 1500 1/h No-load switching frequency • with AC 1500 1/h	— at 600 V Rated value	1.4 A
	• at DC-3 at DC-5	
— at 24 V Rated value 55 A — at 440 V Rated value 0.6 A — at 600 V Rated value 0.6 A Operating power • at AC-1 — at 230 V at 60 °C Rated value 28 kW — at 400 V at 60 °C Rated value 49 kW — at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 15.8 kW • at 690 V Rated value 21.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum 350 1/h • at AC-2 maximum 500 1/h • at AC-4 maximum 150 1/h No-load switching frequency • with AC 1500 1/h No-load switching frequency • with AC 1500 1/h No-load switching frequency • with AC 1500 1/h	— at 110 V Rated value	55 A
— at 440 V Rated value — at 600 V Rated value Operating power • at AC-1 — at 230 V at 60 °C Rated value — at 400 V at 60 °C Rated value — at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value • at 690 V Rated value 15.8 kW Active power loss at AC-3 at 400 V for rated value of the operating cycles at AC-1 maximum • at AC-2 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum • at AC-4 maximum No-load switching frequency • with AC • with AC	— at 220 V Rated value	25 A
— at 600 V Rated value Operating power • at AC-1 — at 230 V at 60 °C Rated value — at 400 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum No-load switching frequency • with AC • with AC 1 500 1/h No-load switching frequency • with AC	— at 24 V Rated value	55 A
	— at 440 V Rated value	0.6 A
at AC-1 — at 230 V at 60 °C Rated value — at 400 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V at 60 °C Rated value St kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value • at 690 V Rated value Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum 150 1/h No-load switching frequency • with AC 1 500 1/h No-load switching frequency • with AC	— at 600 V Rated value	0.6 A
at 230 V at 60 °C Rated value at 400 V at 60 °C Rated value 49 kW at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value 15.8 kW • at 690 V Rated value 21.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum 700 1/h • at AC-2 maximum 350 1/h • at AC-3 maximum 1500 1/h • at AC-4 maximum 1500 1/h No-load switching frequency • with AC 1 500 1/h	Operating power	
- at 400 V at 60 °C Rated value 49 kW - at 690 V at 60 °C Rated value 85 kW Operating power for ≥ 200000 operating cycles at AC-4	● at AC-1	
— at 690 V at 60 °C Rated value Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum No-load switching frequency • with AC • with AC 1500 1/h 1500 1/h No-load switching frequency • with AC	— at 230 V at 60 °C Rated value	28 kW
Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum No-load switching frequency • with AC • with AC 1 500 1/h	— at 400 V at 60 °C Rated value	49 kW
AC-4 • at 400 V Rated value • at 690 V Rated value Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum No-load switching frequency • with AC • with AC	— at 690 V at 60 °C Rated value	85 kW
at 690 V Rated value 21.8 kW Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-4 maximum No-load switching frequency with AC at 690 V Rated value 21.8 kW 5.7 W 5.7 W 700 1/h 700 1/h 1500 1/h 1500 1/h		
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum 150 1/h No-load switching frequency • with AC 1 500 1/h	• at 400 V Rated value	15.8 kW
the operating current per conductor Operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum No-load switching frequency • with AC • with AC	● at 690 V Rated value	21.8 kW
 at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum No-load switching frequency with AC 1 500 1/h 	•	5.7 W
 at AC-2 maximum at AC-3 maximum at AC-4 maximum 150 1/h No-load switching frequency with AC 1 500 1/h 	Operating frequency	
 at AC-3 maximum at AC-4 maximum No-load switching frequency with AC 150 1/h 1500 1/h 	• at AC-1 maximum	700 1/h
● at AC-4 maximum No-load switching frequency ● with AC 150 1/h 1 500 1/h	● at AC-2 maximum	350 1/h
No-load switching frequency ● with AC 1 500 1/h	• at AC-3 maximum	500 1/h
• with AC 1 500 1/h	● at AC-4 maximum	150 1/h
	No-load switching frequency	
• for DC 1 500 1/h	• with AC	
	• for DC	1 500 1/h

Control circuit/ Control:	
Type of voltage of the control supply voltage	AC/DC
Control supply voltage with AC	
at 50 Hz Rated value	20 33 V
• at 60 Hz Rated value	20 33 V
Control supply voltage for DC	
Rated value	20 33 V
Operating range factor control supply voltage rated value of the magnet coil with AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
Operating range factor control supply voltage rated value of the magnet coil for DC	0.8 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of the magnet coil with AC	
● at 50 Hz	40 V·A
● at 60 Hz	40 V·A
Apparent holding power of the magnet coil with AC	
● at 50 Hz	2 V·A
● at 60 Hz	2 V·A
Closing power of the magnet coil for DC	23 W
Holding power of the magnet coil for DC	1 W
Closing delay	
• with AC	45 70 ms
• for DC	45 60 ms
Opening delay	
• with AC	35 55 ms
• for DC	35 55 ms
Arcing time	10 20 ms
Residual current of the electronics for control with signal <0>	
• with AC at 230 V maximum permissible	20 mA
• for DC at 24 V maximum permissible	20 mA
Auxiliary circuit:	
Number of NC contacts	
• for auxiliary contacts	
— instantaneous contact	1
Number of NO contacts	
• for auxiliary contacts	
 instantaneous contact 	1
Product expansion Auxiliary switch	Yes
Operating current at AC-12 maximum	10 A

Operating current at AC-15	
• at 230 V Rated value	10 A
• at 400 V Rated value	3 A
● at 690 V Rated value	1 A
Operating current at DC-12	
• 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 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 the 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	65 A
• at 600 V Rated value	62 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V Rated value	5 hp
— at 230 V Rated value	15 hp
 for three-phase AC motor 	
— at 200/208 V Rated value	20 hp
— at 220/230 V Rated value	25 hp
— at 460/480 V Rated value	50 hp
— at 575/600 V Rated value	60 hp
Contact rating of the auxiliary contacts acc. to UL	A600 / P600

Short-circuit:

Design of the fuse link

• for short-circuit protection of the main circuit

— with type of assignment 1 required

— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A

fuse gL/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 and snap-on mounting onto 35 mm standard mounting rail
ou.iu.ig typo	according to DIN EN 50022
Side-by-side mounting	Yes
Height	113.4 mm
Width	55 mm
Depth	130 mm
Required spacing	
with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— at the side	6 mm
— downwards	50 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	6 mm

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Connections/	' l erminai	ς.
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Type of electrical connection	
• for main current circuit	screw-type terminals
 for auxiliary and control current circuit 	screw-type terminals
Type of connectable conductor cross-section	
• for main contacts	
— single or multi-stranded	2x (1 35 mm²), 1x (1 50 mm²)
 finely stranded with core end processing 	2x (1 25 mm²), 1x (1 35 mm²)
 for AWG conductors for main contacts 	2x (18 2), 1x (18 1)
 for auxiliary contacts 	
 single or multi-stranded 	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)
 for AWG conductors for auxiliary contacts 	2x (20 16), 2x (18 14)

Safety related data:	
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	40 %
 with high demand rate acc. to SN 31920 	73 %
Product function	
 Mirror contact acc. to IEC 60947-4-1 	Yes
• positively driven operation acc. to IEC 60947-5-	No
1	
Protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529

Mechanical data:

Size of contactor S2

Ambient conditions:

Installation altitude at height above sea level 2 000 m maximum

Ambient temperature

during operation
 during storage
 -25 ... +60 °C
 -55 ... +80 °C

Certificates/ approvals:

General Product Approval

other

Confirmation

Environmental Confirmations







Further information

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

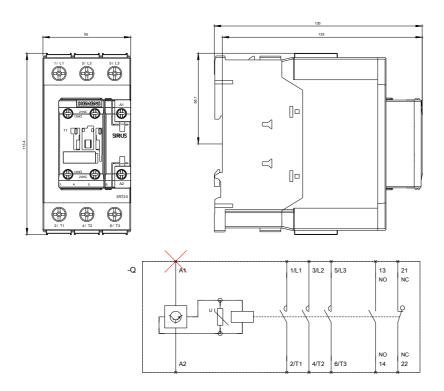
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT20381NB30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT20381NB30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT20381NB30&lang=en



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last modified:

14.05.2015