

Circuit Breakers Thermal Magnetic Type

- Rated from 0.1 to 32.0 amps
- Available in single, double and triple pole configurations
- Offers normally open (N/O) and normally closed (N/C) auxiliary contacts
- Lever-switch trip/reset function
- Mounts on 32mm or 35mm DIN-rail
- UL 1077 recognized
- CSA C22.2 No. 235

CB2211-10 Single Pole



CB2212-10 Double Pole



CB2213-10 Triple Pole



Ordering Data
Internal Resistance per Pole (ohms) (M1)
92
26.1
11.6
6.6
4.1
3
1.65
1.1
0.47
0.28
0.183
0.124
0.077
0.063
0.045
≤0.02
≤0.02
≤0.02
≤0.02
≤0.02
≤0.02
≤0.02
≤0.02
≤0.02
≤0.02

Type: Single Pole - CB2211-10			
Current Ratings (amps)	N/O Aux. Part No.	N/C Aux. Part No.	
0.1	9911010000	9911010005	
0.2	9911020000	9911020005	
0.3	9911030000	9911030005	
0.4	9911040000	9911040005	
0.5	9911050000	9911050005	
0.6	9911060000	9911060005	
0.8	9911080000	9911080005	
1.0	9911100000	9911100005	
1.5	9911150000	9911150005	
2.0	9911200000	9911200005	
2.5	9911250000	9911250005	
3.0	9911300000	9911300005	
4.0	9911400000	9911400005	
5.0	9911500000	9911500005	
6.0	9911600000	9911600005	
8.0	9911800000	9911800005	
10	9921100000	9921100005	
12	9921200000	9921200005	
15	9921500000	9921500005	
16	9921600000	9921600005	
18	9921800000	9921800005	
20	9921200000	9921200005	
25	9921250000	9921250005	
32	9921320000	9921320005	

Type: Double Pole - CBB2212-10			
Current Ratings (amps)	N/O Aux. Part No.	N/C Aux. Part No.	
0.1	9912010000	9912010003	
0.2	9912020000	9912020003	
0.3	9912030000	9912030003	
0.4	9912040000	9912040003	
0.5	9912050000	9912050003	
0.6	9912060000	9912060003	
0.8	9912070000	9912070003	
1.0	9912080000	9912080003	
1.5	9912100000	9912100003	
2.0	9912200000	9912200003	
2.5	9912250000	9912250003	
3.0	9912300000	9912300003	
4.0	9912400000	9912400003	
5.0	9912500000	9912500003	
6.0	9912600000	9912600003	
8.0	9912800000	9912800003	
10	9922100000	9922100003	
12	9922120000	9922120003	
15	9922150000	9922150003	
16	9922160000	9922160003	
18	9922180000	9922180003	
20	9922200000	9922200003	
25	9922250000		
32	9922320000		

Type: Triple Pole - CBB2213-10			
Current Ratings (amps)	N/O Aux. Part No.	N/C Aux. Part No.	
0.1	9913010000	9913010003	
0.2	9913020000	9913020003	
0.3	9913030000	9913030003	
0.4	9913040000	9913040003	
0.5	9913050000	9913050003	
0.6	9913060000	9913060003	
0.8	9913080000	9913080003	
1.0	9913100000	9913100003	
1.5	9913150000	9913150003	
2.0	9913200000	9913200003	
2.5	9913250000	9913250003	
3.0	9913300000	9913300003	
4.0	9913400000	9913400003	
5.0	9913500000	9913500003	
6.0	9913600000	9913600003	
8.0	9913800000	9913800003	
10	9923100000	9923100003	
12	9923120000	9923120003	
15	9923150000	9923150003	
16	9923160000	9923160003	
18	9923180000	9923180003	
20	9921320000	9921320003	
25	9923250000		
32	9923320000		

Part Number Table - Example

To order CB2212-10 Double Pole Circuit Breaker with N/O Aux., Part No. 9912100003

- Current Rating of 1.0 amps
- Internal Resistance per Pole of 1.1 ohms
- Trip Curve - M1, Medium (Standard)
- N/C - N/O Auxiliary Contacts

9 9 1 2 1 0 0 0 3

Auxiliary Contacts*

- *00* - N/C Auxiliary Contact
- *02* - W/O Auxiliary Contact
- *03* - N/C - N/O Auxiliary Contacts (double and triple pole only)
- *05* - N/O Auxiliary Contact

Trip Curves (Type 4)

- *00* - M1, Medium (standard)
- *11* - F1, Fast (DC only)
- *12* - M3, Low Resistance
- *13* - T1, Delayed

Base Part No. (Indicates number of poles)

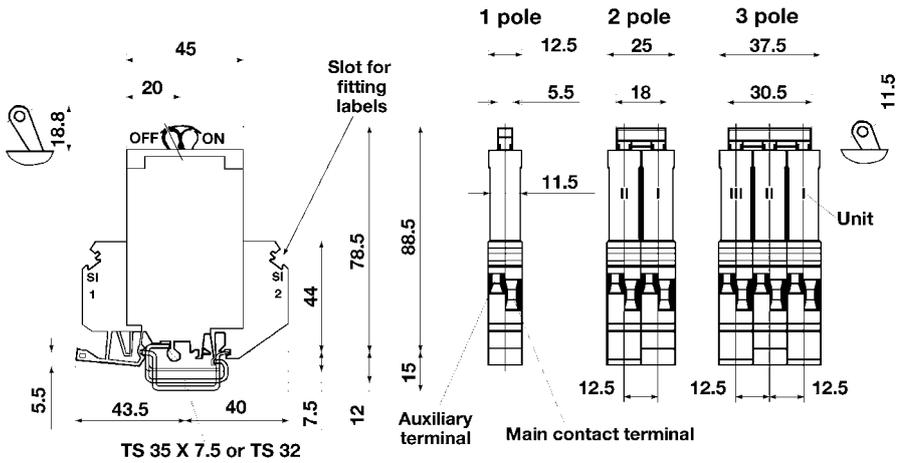
Standard Current Ratings and Typical Internal Resistance Values
Internal Resistance (ohms)

Current Ratings (amps)	F1 fast acting for DC	M1 standard delay for AC & DC	T1 delayed for AC	M3 low resistance standard delay for AC & DC	T2 thermal for AC & DC
0.1	162	92	81	42	77
0.2	39.3	26.1	24.2	11.7	23
0.3	17.5	11.6	10.4	5.6	10.2
0.4	9.2	6.6	6.0	2.9	5.7
0.5	6.8	4.1	3.9	1.75	3.7
0.6	4.2	3	2.7	1.42	2.6
0.8	2.8	1.6	1.53	0.75	1.39
1.0	1.6	1.10	0.98	0.5	0.9
1.5	0.78	0.47	0.42	0.22	0.36
2.0	0.42	0.28	0.24	0.136	0.19
2.5	0.26	0.183	0.17	0.083	0.141
3.0	0.8	0.124	0.12	0.057	0.091
4.0	0.12	0.077	0.073	0.041	0.051
5.0	0.092	0.063	0.055	0.032	0.040
6.0	0.054	0.045	0.039	0.021	0.027
8.0	0.025	≤0.02	≤0.02	≤0.02	≤0.02
10	0.022	≤0.02	≤0.02	≤0.02	≤0.02
12	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02
16	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02
20	-	≤0.02	≤0.02	-	≤0.02
25	-	≤0.02	≤0.02	-	≤0.02
32	-	≤0.02	≤0.02	-	≤0.02

*Auxiliary for the 2-pole will be configured: N/C for 1st pole & N/O for 2nd pole. Auxiliary for the 3-pole will be configured: N/C for 1st pole & N/O for the 3rd pole.

*Standard breakers will be calibrated to a M1 trip curve with N/O Auxiliary Contacts.

CB2200 Series



Dimensions in mm

Technical Data

Rated voltage & current†	UL
	CSA
	VDE
Auxiliary contacts	
Creepage resistance	
Dielectric strength	
Insulation resistance	
Interrupting capacity (VDE 0660, Part 101, P-2)	
Interrupting capacity (UL 1077/EN 60934 PC1)	
Typical life at 2 x rated current	
Shock	
Torque	Nm (lb. in.)
Vibration	
Temperature range	
Corrosion	
Humidity	
Weight	
Wire size (UL)	

Accessories

Jumpers	Daisy Chain 50
Busbars	

Marking Tags

1 2 3 4 5 6	Special print only
	Consecutive horizontal
	Consecutive vertical

†Note: Resistive and inductive loads (0.05-16 A)
*Please specify horizontal or vertical print when ordering.

Technical Data

Voltage Ratings		Current Ratings
277 / 480 VAC (50/60 Hz); 65 VDC		0.1...32 A
277 / 480 VAC (50/60 Hz); 65 VDC		0.1...32 A
250 / 415 VAC / 65 VDC		0.1...32 A
250 VAC / 65 VDC, 1 A		
PTI 600 to IEC 112		
3,000 VAC; IEC 664 & 664 A		
> 100 MΩ (DC 500 V)		
Rated current	Rated voltage	Rupture capacity (3 times)
0.05...0.8 A	250 / 415 VAC	400 A
6...32 A	250 / 415 VAC	800 A
Rated current	Rated voltage	Max. rupture capacity (3 times)
0.1...16 A	277 / 480 VAC	5000 A
20...32 A	277 / 480 VAC	2000 A
0.1...32 A	65 VDC	2000 A
5,000 operations		
25 g (11 ms) to IEC 68-2-27, Test Ea		
0.6 (5.3) Auxiliary contact: 0.5 (4.4)		
5 g (57 to 500 Hz / ±0.38 mm, 10 to 57 Hz) to IEC 68-2-6, Test Fc		
-30...+60°C (-22°F...+140°F)		
96 hours at 5% salt spray, to IEC 68-2-11, Test Ka		
240 hours at 95% RH, to IEC 68-2-3, Test Ca		
Approximately 60 g per pole		
max 6 mm²...8 AWG		max 1.5 mm²...14 AWG (Aux. contact)

Technical Data

Type	Part No.
BDC 50, 20 A maximum	9970290000
1 pole (CB2200)	9986510000
2 pole (CB2200)	9987360000

Technical Data

Type	Part No.
DEK 5/6	0490360000*
DEK 5/6	0468660001
DEK 5/6	0468760001

Trip Curves—Thermal Magnetic Type
Typical time/current characteristics at 23°C

CB2200 Series

