

CMB-Series

Thermal Circuit Breaker

PRODUCT WEBPAGE

request sample, configure part



Miniature, Push-to-Reset

Part of Carling's push-to-reset family of thermal circuit breakers, the miniature CMB-Series is designed with minimal moving parts to assure cost-effective but reliable protection for a wide range of equipment applications. Offering a consistent trip point over temperatures ranging from -10°C to +60°C, this single pole breaker is rated from 3-20 amps, 125/250VAC, 32VDC with 1,000 AIC at 250VAC and 2,500 AIC at 32VDC.

1

Pole

3-20

Amps

125-250

VAC Max

32

VDC Max

Typical Applications

- Household Appliances
- On/Off-Highway
- Medical Equipment
- Power Strips & Supplies
- Marine
- Audio-Visual Equipment

Ordering Scheme

Sample Part Number **CMB - 10 3 - 11 C 3 N - B - A / 10**

Selection 1 2 3 4 5 6 7 8 9 10

1. SERIES

CMB

2. RATING

03	3 amps	08	8 amps	15	15 amps
04	4 amps	10	10 amps	16	16 amps
05	5 amps	12	12 amps	20	20 amps
06	6 amps	13	13 amps		
07	7 amps	14	14 amps		

3. VOLTAGE

3 125-250VAC / 32 VDC

4. MOUNTING HOLE see next page for diagram

11	M11 ¹
12	M12 ²
00	Snap In Style ³
27	3/8" 27 UNS ¹⁵
28	3/8" 27 UNS (double flattened) ¹²

5. BUSHING see next page for diagram

PLASTIC		METAL	
C	Type C ⁴	J	Type J ⁸
D	Type D ⁴		
E	Type E ⁵		
G	Type G ⁸		
H	Type H ⁶		
K	Type K ¹³		

6. MOUNTING NUT ⁷ see next page for diagram

N	None	5	Type 5
1	Type 1	6	Type 6 ¹⁴
2	Type 2	7	Type 7 ⁹
3	Type 3 ¹¹	8	Type 8 ⁹
4	Type 4		

7. INDICATOR PLATE ⁹ see next page for diagram

N	None	B	Silver Printing on Black
A	Embossed Legend		

8. BUTTON

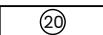
B	Black	R	Red	W	White
----------	-------	----------	-----	----------	-------

9. TERMINAL ^{10,11,15} see next page for diagram

A	Type A	E	Type E	J	Type J
B	Type B	F	Type F	K	Type K
C	Type C	G	Type G	R	Type R
D	Type D	H	Type H		

10. BUTTON MARKING (IF BLANK, NO MARKING) ¹³

Button Marking Orientation:

line  load

03	3 amp	08	8 amp	15	15 amp
04	4 amp	10	10 amp	16	16 amp
05	5 amp	12	12 amp	20	20 amp
06	6 amp	13	13 amp		
07	7 amp	14	14 amp		

Notes: Tolerance $\pm .005$ [.127] unless otherwise specified.

- 1 Used with bushing C or D only.
- 2 Used with H bushing only.
- 3 Used with bushing E only.
- 4 Used with M11 mounting hole only.
- 5 Used with mounting hole 00 only.
- 6 Used with M12 mounting hole only.
- 7 All hardware available separately. Consult factory.
- 8 Available with mounting hole 27 only.
- 9 Available with G, J or K bushing only.
- 10 Amp rating must match button marking (ex: 20 will be marked on the button of CMB-203-27G3N-W-A/20)
- 11 Includes molded in "PRESS TO RESET" marking.
- 12 Available with K bushing only.
- 13 Available with mounting hole 28 only.
- 14 Thickness is 3.0 mm, .118 in.
- 15 Available with G or J bushing only.

 [Configure Complete Part Number >](#)

 [Browse Standard Parts >](#)

Ordering Scheme Diagrams

4. MOUNTING HOLE

 +.008 +.20 -.000 -.00 .441 [11.2] +.008 +.20 -.000 -.00 .394 [10.0]	 +.008 +.20 -.008 -.00 .481 [12.2] +.008 +.20 -.000 -.00 .433 [11.0]	 +.008 +.20 -.000 -.00 .623 [15.8] Panel Cutout Thickness: [0.8] - [2.5]mm .032 - .098 +.008 +.20 -.000 -.00 .544 [13.8]	 +.008 +.20 -.000 -.00 .343 [8.7] +.008 +.20 -.000 -.00 .382 [9.7]	 +.008 +.20 -.000 -.00 .382 [9.7] +.008 +.20 -.000 -.00 .302 [7.7]
11	12	00	27	28

5. BUSHING

PLASTIC						METAL
 .067 [1.7] 382 [9.7]	 .067 [1.7] 382 [9.7]	 .118 [3.0] 382 [9.7]	 .067 [1.7] 319 [8.1]	 .067 [1.7] 472 [12.0]	 .067 [1.7] 472 [12.0]	 .067 [1.7] 472 [12.0]
TYPE C	TYPE D	TYPE E	TYPE H	TYPE G	TYPE K	TYPE J

6. MOUNTING NUT

METAL	METAL PAL	PLASTIC	HEX BOOT
 Ø.591 [Ø15.0] .099 [2.5]	 .552 [14.0] .110 [2.8]	 .562 [14.3] .094 [2.4]	 Ø.741 [Ø18.8] .118 [3.0]
TYPE 1	TYPE 2/ TYPE 6	TYPE 7	TYPE 3
			TYPE 4
			TYPE 5/TYPE 8

Type 5 is clear hex boot. Type 8 is black hex boot (available for bushings G, J & K only); Type 3 nut includes molded in "PRESS TO RESET" marking.

7. INDICATOR PLATE

Embossed (ALUMINUM)	Silver Printing On Black
 .887 [22.5] .016 [.4]	 .887 [22.5] .016 [.4]

All indicator plates are marked "Suppl. Prot. press to reset".

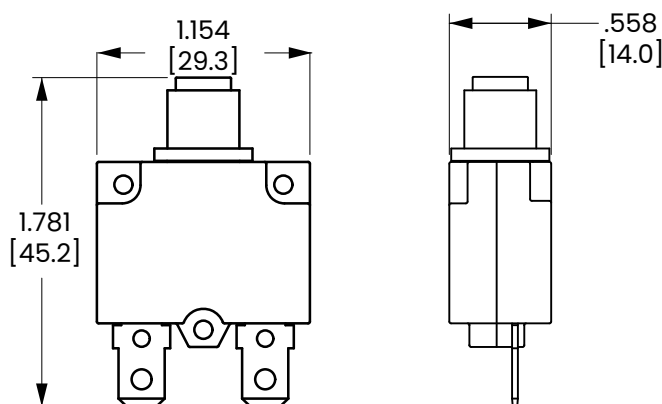
9. TERMINAL

 .250 Tab	 .126 [3.2] .250 Tab	 .126 [3.2] .250 Tab	 .126 [3.2] .250 Tab	 .126 [3.2] .250 Tab	 Screw Terminal	 3.2 [126] 10.41 [41] .250 Tab	 3.2 [126] 10.41 [41] Screw Terminal 90° Bend	 Screw Terminal 90° Bend	 3.2 [126] 10.41 [10.41] Screw Terminal without	 3.2 [126] 10.41 [41] .250 Tab
TYPE A : Straight	TYPE B : Line Pin	TYPE C : Load Pin	TYPE D : 90° Bend	TYPE E : 90° Bend Backward	TYPE F : Screw Terminal	TYPE G : Mixed Terminals 90° Bend Line	TYPE H : Screw Terminal 90° Bend	TYPE J : Screw Terminal 90° Bend	TYPE R : Screw Terminal without	TYPE K : Mixed Terminals 90° Bend Load

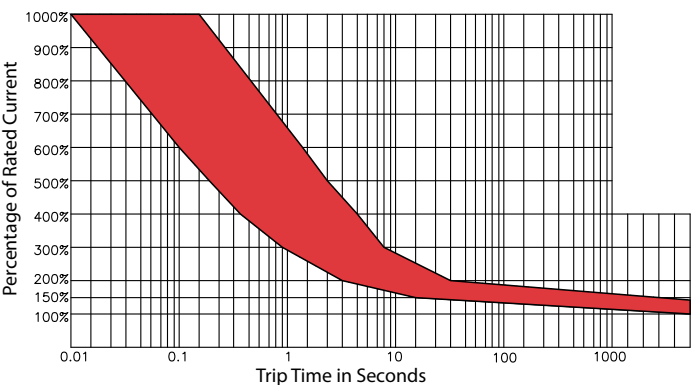
F,G,H,J terminals are 8-32 UNC

Dimensional Specs

inches [millimeters]



Time Delay



Overload	Trip Time
100%	No Trip
135%	Trip in 1 hr
200%	4.0 ~ 40 sec.
300%	0.9 ~ 8.0 sec.
400%	0.42 ~ 5.0 sec.
500%	0.25 ~ 3.0 sec.
600%	0.01 ~ 1.8 sec.

Trip Time Factor ¹			
-10 °C	x 1.70	30 °C	x 0.90
-5 °C	x 1.60	35 °C	x 0.85
0 °C	x 1.50	40 °C	x 0.80
5 °C	x 1.40	45 °C	x 0.75
10 °C	x 1.30	50 °C	x 0.70
15 °C	x 1.20	55 °C	x 0.65
20 °C	x 1.10	60 °C	x 0.60
25 °C	x 1.00		

Notes:
1. Trip Time factor is a guideline that indicates ambient temperature effect on trip times at various overload values.

Authorized Sales Representatives and Distributors

Click on a region of the map below to find your local representatives and distributors or visit www.carlingtech.com/findarep.



About Carling

Founded in 1920, Carling Technologies is a leading manufacturer of electrical and electronic switches and assemblies, circuit breakers, electronic controls, power distribution units, and multiplexed power distribution systems. With six ISO9001 and IATF16949 registered manufacturing facilities and technical sales offices worldwide, Carling Technologies Sales, Service and Engineering teams do much more than manufacture electrical components, they engineer powerful solutions! To learn more about Carling please visit www.carlingtech.com/company-profile.

To view all of Carling's environmental, quality, health & safety certifications please visit www.carlingtech.com/environmental-certifications.