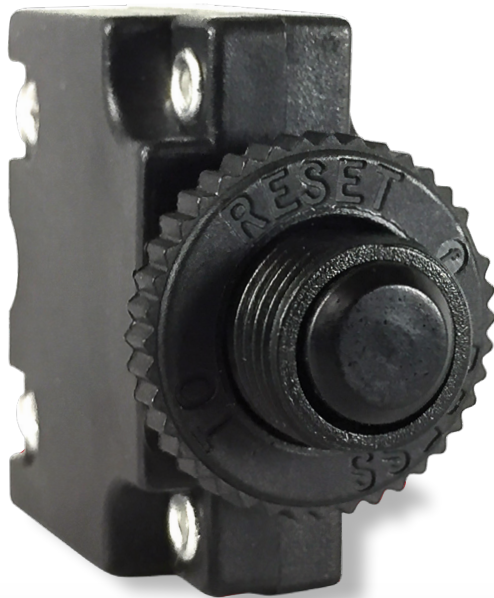


# CMB-Series

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

## 5. BUSHING see next page for diagram

PLASTIC		METAL	
C	Type C <sup>4</sup>	J	Type J <sup>8</sup>
D	Type D <sup>4</sup>		
E	Type E <sup>5</sup>		
G	Type G <sup>8</sup>		
H	Type H <sup>6</sup>		
K	Type K <sup>13</sup>		

## 6. MOUNTING NUT 7 see next page for diagram

N	None	5	Type 5
1	Type 1	6	Type 6 <sup>14</sup>
2	Type 2	7	Type 7 <sup>9</sup>
3	Type 3 <sup>11</sup>	8	Type 8 <sup>9</sup>
4	Type 4		

## 7. INDICATOR PLATE 9 see next page for diagram

N	None	B	Silver Printing on Black
A	Embossed Legend		

## 8. BUTTON

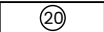
B	Black	R	Red	W	White
---	-------	---	-----	---	-------

## 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 ±.005 [.127] unless otherwise specified.

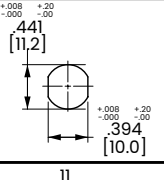
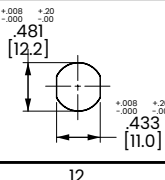
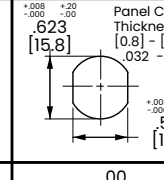
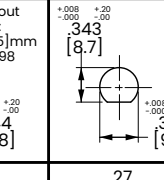
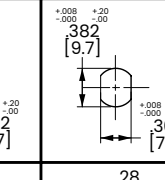
- 1 Used with bushing C or D only.
- 2 Used with H bushing only.
- 3 Used with bushing E only.
- 4 Used with M11 mounting hole only.
- 5 Used with mounting hole 00 only.
- 6 Used with M12 mounting hole only.
- 7 All hardware available separately. Consult factory.
- 8 Available with mounting hole 27 only.
- 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 >](#)

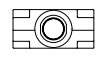

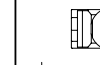




[Browse Standard Parts >](#)

# Ordering Scheme Diagrams

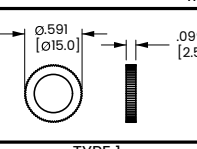
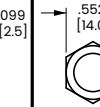
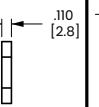
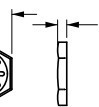
## 4. MOUNTING HOLE

 <p><math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .441 \\ [11.2] \end{matrix}</math>  <math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .394 \\ [10.0] \end{matrix}</math></p>	 <p><math>\begin{matrix} +.008 &amp; +.20 \\ -.008 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .481 \\ [12.2] \end{matrix}</math>  <math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .433 \\ [11.0] \end{matrix}</math></p>	 <p>Panel Cutout          Thickness:  <math>[0.8] - [2.5]</math>mm  <math>.032 - .098</math>  <math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .623 \\ [15.8] \end{matrix}</math>  <math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .544 \\ [13.8] \end{matrix}</math></p>	 <p><math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .343 \\ [8.7] \end{matrix}</math>  <math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .382 \\ [9.7] \end{matrix}</math></p>	 <p><math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .382 \\ [9.7] \end{matrix}</math>  <math>\begin{matrix} +.008 &amp; +.20 \\ -.000 &amp; -.00 \end{matrix}</math>  <math>\begin{matrix} .302 \\ [7.7] \end{matrix}</math></p>
11	12	00	27	28

## 5. BUSHING

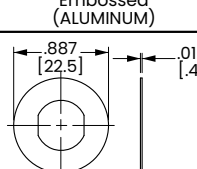
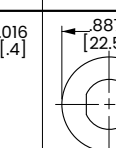
PLASTIC						METAL
						
$\begin{matrix} .067 \\ [1.7] \end{matrix}$	$\begin{matrix} .067 \\ [1.7] \end{matrix}$	$\begin{matrix} .118 \\ [3.0] \end{matrix}$	$\begin{matrix} .067 \\ [1.7] \end{matrix}$	$\begin{matrix} .067 \\ [1.7] \end{matrix}$	$\begin{matrix} .067 \\ [1.7] \end{matrix}$	$\begin{matrix} .067 \\ [1.7] \end{matrix}$
$\begin{matrix} .382 \\ [9.7] \end{matrix}$	$\begin{matrix} .382 \\ [9.7] \end{matrix}$	$\begin{matrix} .382 \\ [9.7] \end{matrix}$	$\begin{matrix} .319 \\ [8.1] \end{matrix}$	$\begin{matrix} .472 \\ [12.0] \end{matrix}$	$\begin{matrix} .472 \\ [12.0] \end{matrix}$	$\begin{matrix} .472 \\ [12.0] \end{matrix}$
TYPE C	TYPE D	TYPE E	TYPE H	TYPE G	TYPE K	TYPE J

## 6. MOUNTING NUT

METAL	METAL PAL	PLASTIC	HEX BOOT
			
$\begin{matrix} \phi .591 \\ [\phi 15.0] \end{matrix}$	$\begin{matrix} .552 \\ [14.0] \end{matrix}$	$\begin{matrix} \phi .741 \\ [\phi 18.8] \end{matrix}$	$\begin{matrix} \phi .591 \\ [\phi 15.0] \end{matrix}$
$\begin{matrix} .099 \\ [2.5] \end{matrix}$	$\begin{matrix} .110 \\ [2.8] \end{matrix}$	$\begin{matrix} .118 \\ [3.0] \end{matrix}$	$\begin{matrix} .118 \\ [3.0] \end{matrix}$
$\begin{matrix} .094 \\ [2.4] \end{matrix}$			
TYPE 1	TYPE 2/ TYPE 6	TYPE 3	TYPE 4
			TYPE 5/TYPE 8

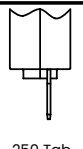
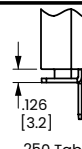
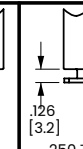
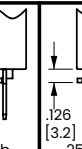
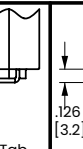
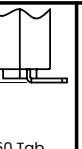
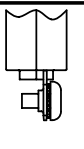
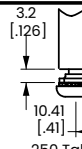
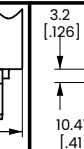
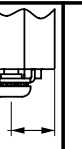
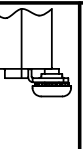
Type 5 is clear hex boot. Type 8 is black hex boot (available for bushings G, J & K only); Type 3 nut includes molded in "PRESS TO RESET" marking.

## 7. INDICATOR PLATE

Embossed (ALUMINUM)	Silver Printing On Black
	
$\begin{matrix} .887 \\ [22.5] \end{matrix}$	$\begin{matrix} .887 \\ [22.5] \end{matrix}$
$\begin{matrix} .016 \\ [.4] \end{matrix}$	$\begin{matrix} .016 \\ [.4] \end{matrix}$

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

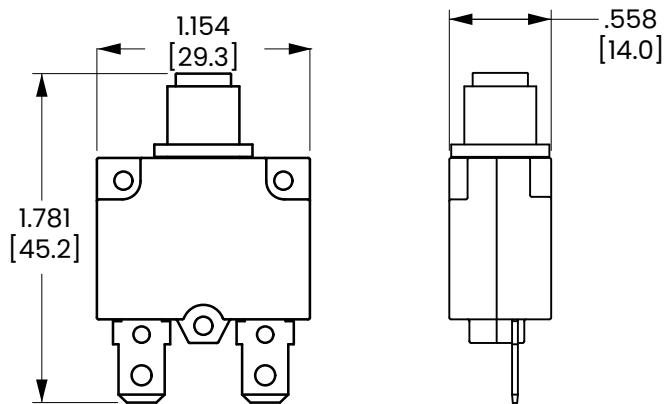
## 9. TERMINAL

										
.250 Tab	.250 Tab	.250 Tab	.250 Tab	.250 Tab		.250 Tab	.250 Tab		.250 Tab	.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

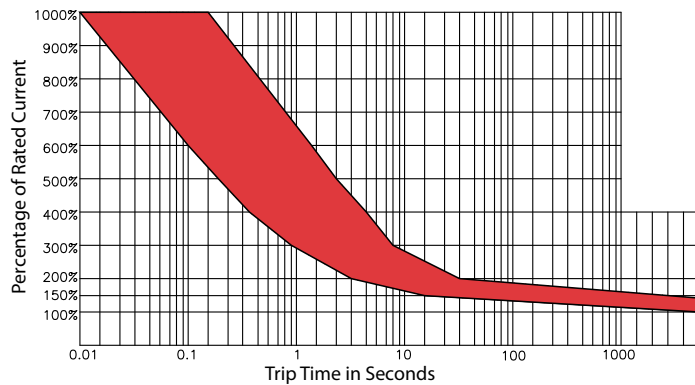
F,G,H,J terminals are 8-32 UNC

# 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 <sup>1</sup>			
-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.

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[CMB20327GNNWF](#) [CMB20327J6NWA](#) [CMB20327JNNWA](#) [CMB20312H3NWA](#) [CMB20312HNNWA](#)  
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[CMB15311D3NBA](#) [CMB15311D3NWA](#) [CMB15311DNBBA](#) [CMB15311DNNBA](#) [CMB15311C5NRA](#)  
[CMB15311CNNBA](#)