

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

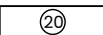
B Black	R Red	W White
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9. TERMINAL ^{10,11,15} see next page for diagram

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.

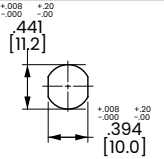
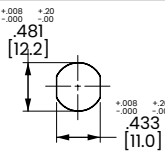
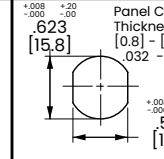
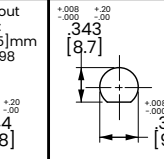
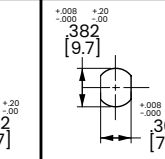
- 1 Used with bushing C or D only.
- 2 Used with H bushing only.
- 3 Used with bushing E only.
- 4 Used with M11 mounting hole only.
- 5 Used with mounting hole 00 only.
- 6 Used with M12 mounting hole only.
- 7 All hardware available separately. Consult factory.
- 8 Available with mounting hole 27 only.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

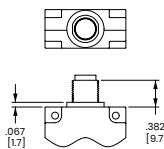
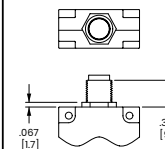
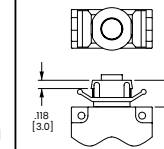
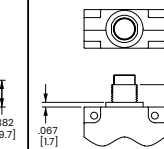
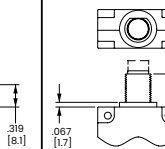
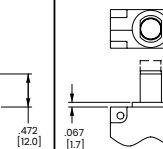
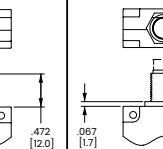
 [Browse Standard Parts >](#)

Ordering Scheme Diagrams

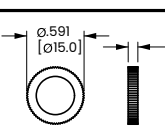
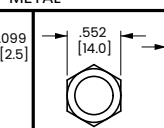
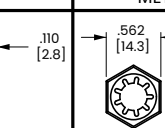
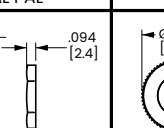
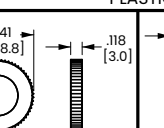
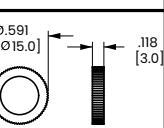
4. MOUNTING HOLE

 +.008 +.20 -.000 -.00 .441 [11.2] +.008 +.20 -.000 -.00 .394 [10.0]	 +.008 +.20 -.000 -.00 .481 [12.2] +.008 +.20 -.000 -.00 .433 [11.0]	 +.008 +.20 -.000 -.00 .623 [15.8] +.008 +.20 -.000 -.00 .544 [13.8] Panel Cutout Thickness: [0.8] - [2.5]mm .032 - .098	 +.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

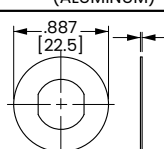
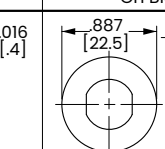
PLASTIC						METAL
						
TYPE C	TYPE D	TYPE E	TYPE H	TYPE G	TYPE K	TYPE J

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]	 Ø.591 [Ø15.0] .118 [3.0]	
TYPE 1	TYPE 2/ TYPE 6	TYPE 7	TYPE 3	TYPE 4	TYPE 5/TYPE 8

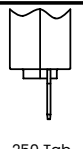
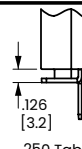
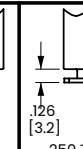
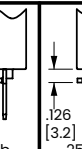
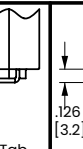
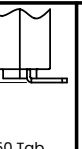
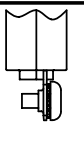
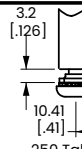
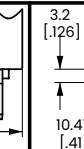
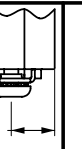
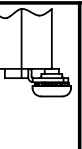
Type 5 is clear hex boot. Type 8 is black hex boot (available for bushings G, J & K only); Type 3 nut includes molded in "PRESS TO RESET" marking.

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".

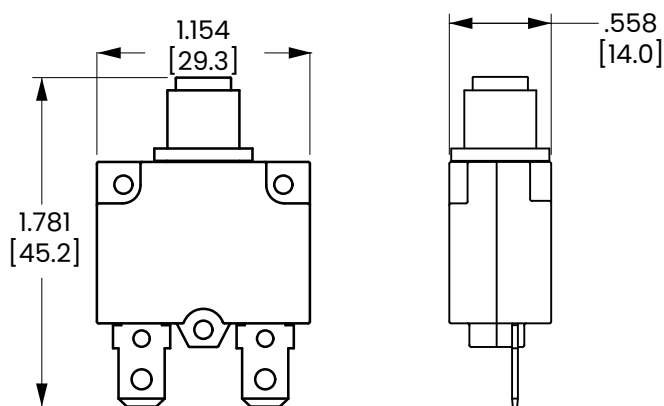
9. TERMINAL

										
.250 Tab	.250 Tab	.250 Tab	.250 Tab	.250 Tab	TYPE F: Screw Terminal	3.2 [.126]	3.2 [.126]		3.2 [.126]	3.2 [.126]
TYPE A: Straight	TYPE B: Line Pin	TYPE C: Load Pin	TYPE D: 90° Bend	TYPE E: 90° Bend Backward		10.41 [.41]	10.41 [.41]		10.41 [.41]	10.41 [.41]
						.250 Tab	.250 Tab		.250 Tab	.250 Tab
						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

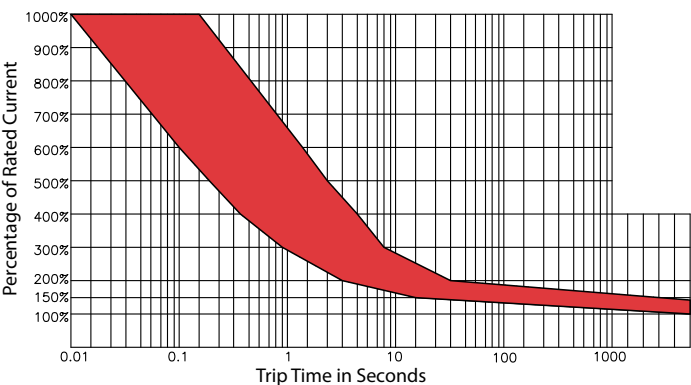
F,G,H,J terminals are 8-32 UNC

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.

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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.

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