

# CMB-Series

## THERMAL CIRCUIT PROTECTORS

**Rating:**

3 to 20A, 125-250VAC, 32VDC

**Approvals:**

UL, CUL, CSA, TUV, CE  
UL1500/ISO8846 for ignition  
protection/marine

**Dielectric Strength:**

2500 VAC/1 minute

**Interrupting capacity:**

2500 amps @ 32 VDC

**Insulation Resistance:**

100M ohms

**Operating Temperature:**

-10°C to 60°C

**Voltage drop:**

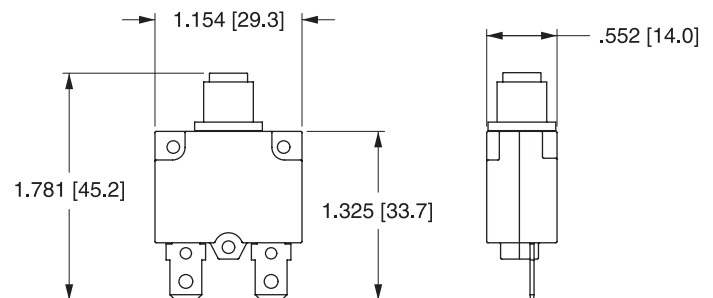
< 0.25 V

**Applications:**

Household Appliances  
Transportation  
Marine  
Power Strips  
Medical Equipment  
Audio Visual Equipment  
Power Supplies

**ROHS Compliant**

A COMPACT, SINGLE POLE, PUSH-TO-RESET  
FAMILY OF THERMAL CIRCUIT BREAKERS

**Dimensional Specifications:**

**Carling Technologies®**

Innovative Designs. Powerful Solutions.

Innovative Designs. Powerful Solutions.

Carling Technologies, Inc.  
60 Johnson Avenue • Plainville, CT 06062-1177  
Phone: (860) 793-9281 • Fax: (860) 793-9231  
Email: sales@carlingtech.com • www.carlingtech.com

# CMB — 10 3 — 11 C 3 N — B — A /10

1 Series      2 Rating      3 Voltage      4 Mounting Hole      5 Bushing Type      6 Mounting Nut      7 Indicator Plate      8 Button      9 Terminal      10 Button Marking

### 1 SERIES CMB

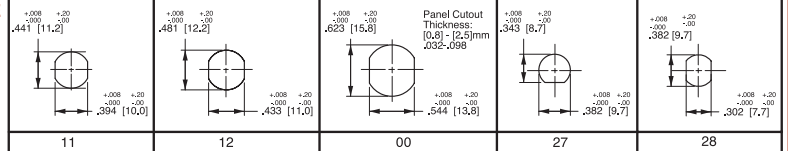
### 3 VOLTAGE 3 125-250VAC/ 32 VDC

### 2 RATING

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

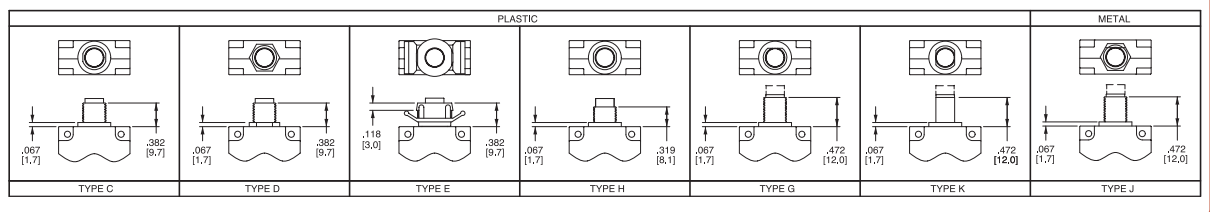
### 4 MOUNTING HOLE

11 <sup>1</sup>	M11
12 <sup>2</sup>	M12
00 <sup>3</sup>	Snap In Style
27 <sup>9</sup>	3/8" 27 UNS
28 <sup>12</sup>	3/8" 27 UNS (double flatted)



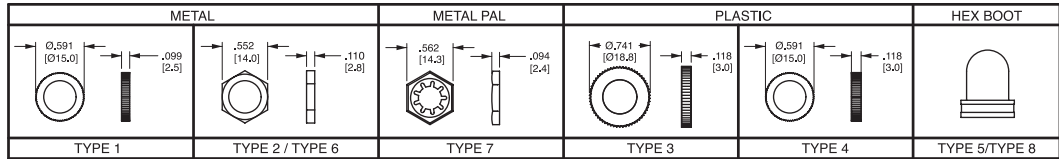
### 5 BUSHING PLASTIC

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



### 6 MOUNTING NUT<sup>7</sup>

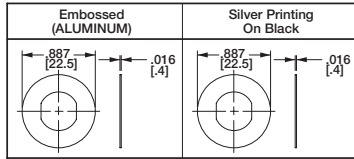
- N None
- 1 Type 1
- 2 Type 2
- 3<sup>11</sup> Type 3
- 4 Type 4
- 5 Type 5
- 6<sup>14</sup> Type 6
- 7<sup>9</sup> Type 7
- 8<sup>9</sup> Type 8



NOTE: 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<sup>7</sup>

- N None
- A Embossed Legend
- B Silver Printing on Black



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

Notes: All dimensions are in [mm]. Tolerance ±.005 [127] unless otherwise specified.

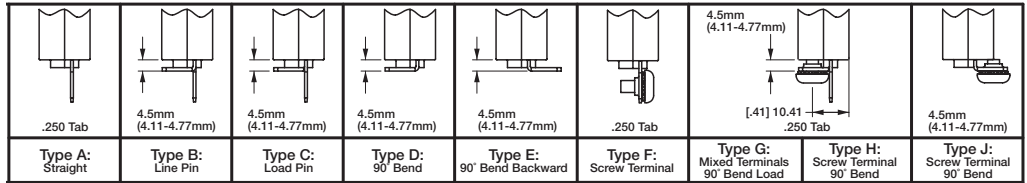
- 1 Used with bushing C or D only.
- 2 Used with H bushing only.
- 3 Used with bushing E only.
- 4 Used with M11 mounting hole only.
- 5 Used with mounting hole 00 only.
- 6 Used with M12 mounting hole only.
- 7 All hardware available separately. Consult factory.
- 8 Available with mounting hole 27 only.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

### 8 BUTTON

- B Black
- R Red
- W White

### 9 TERMINAL

- F Type F
- A Type A
- G Type G
- B Type B
- H Type H
- C Type C
- J Type J
- D Type D
- E Type E

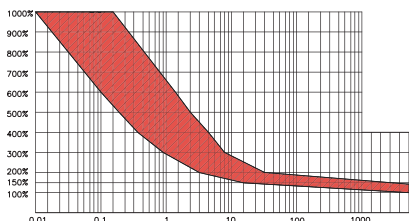


F,G,H,J TERMINALS ARE 8-32 UNC

### 10 BUTTON MARKING (IF BLANK, NO MARKING.)<sup>10</sup> Button Marking Orientation: line load

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

### Time Delay



DERATING FACTOR	
-10°C	X1.70
-5°C	X1.60
0°C	X1.50
5°C	X1.40
10°C	X1.30
15°C	X1.20
20°C	X1.10
25°C	X1.00

DERATING FACTOR	
30°C	X0.90
35°C	X0.85
40°C	X0.80
45°C	X0.75
50°C	X0.70
55°C	X0.65
60°C	X0.60

OVERLOAD	TRIP TIME
100 %	NO TRIP
150 %	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 %	0.1~1.8 sec

Notes:  
Breaker must hold 100% of rated current and must trip at 150% and above, within the time limits shown in curve. Trip times specified at 25° ambient with no preloading.

- 1 To adjust the breaker rating for ambient temperature multiply the breaker rating by the factor. (ex: 5 amp rating at 0°C: 5 x .67 = 3.3 amp. Select 3 amp rating.)

\*Manufacturer reserves the right to change product specification without prior notice.