

# CMB-Series

## THERMAL CIRCUIT BREAKERS

The CMB-Series is a compact, single pole, push-to-reset family of thermal circuit breakers designed to protect equipment. Utilizing simple, precision design with few moving parts, these breakers offer cost effective, extremely reliable circuit protection with high resistance against shock and vibration.



### Product Highlights:

- Ratings from 3-20A, 125, 250VAC, 32VDC
- 2500 VAC/1 minute
- 60°C Max Operating Temperature
- 2500A @ 32VDC Interrupting Capacity
- 100M ohms Insulation Resistance
- Voltage drop <0.25 V
- UL, cUL, CSA, TUV, CE
- UL1500/ISO8846 for ignition protection/marine



### Resources:

[Configure a Complete Part](#)

[\*\*Download CAD & Sales Drawing >\*\*](#)

### Applications:

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



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**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

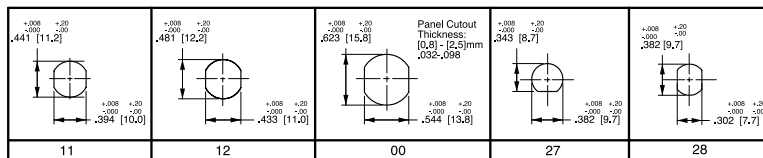
3 125-250VAC/ 32 VDC

### 2 RATING

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

### 4 MOUNTING HOLE

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



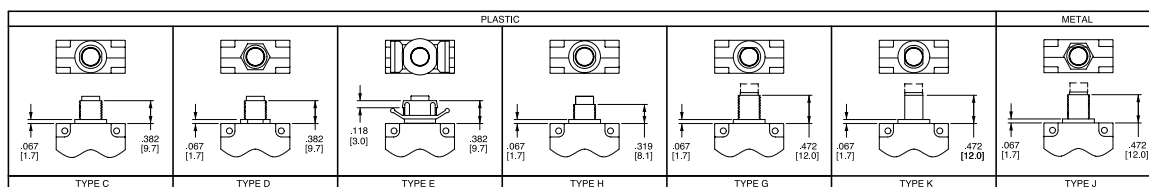
### 5 BUSHING

#### 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

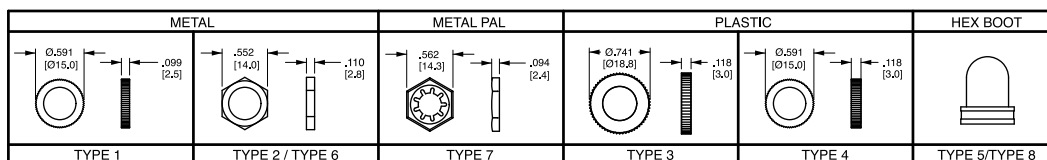
#### METAL

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 Type 7  
8 <sup>9</sup> Type 8

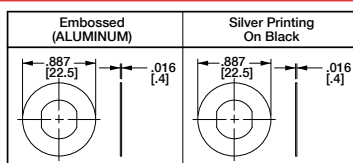


NOTE: Type 5 is clear hex boot. Type 8 is black hex boot (available for bushings G, J & K only); Type 3 nut includes molded in "PRESS TO RESET" marking.

### 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  $\pm 0.005$  [0.127] unless otherwise specified.

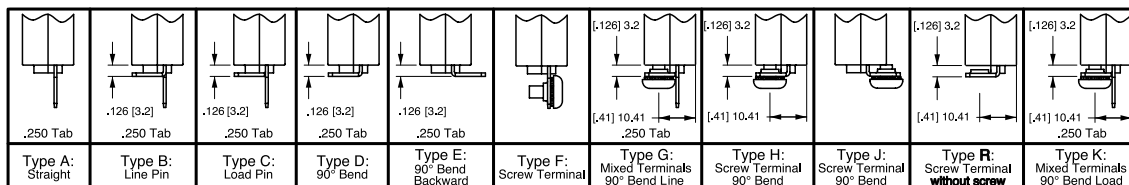
- Used with bushing C or D only.
- Used with H bushing only.
- Used with bushing E only.
- Used with M11 mounting hole only.
- Used with mounting hole 00 only.
- Used with M12 mounting hole only.
- All hardware available separately. Consult factory.
- Available with mounting hole 27 only.
- Available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

### 8 BUTTON

B Black      R Red      W White

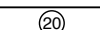
### 9 TERMINAL

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



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

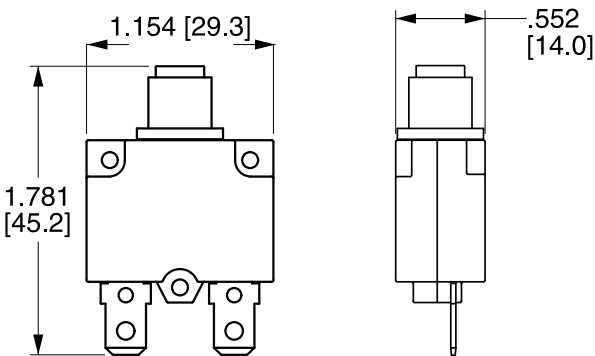
### 10 BUTTON MARKING (IF BLANK, NO MARKING)<sup>10</sup>

Button Marking Orientation: line  load

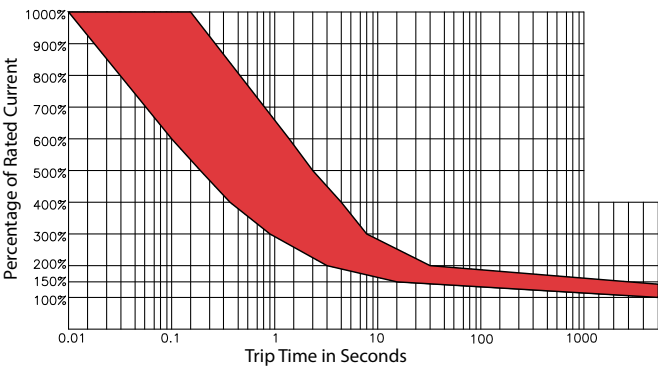
03 3 amp      05 5 amp      07 7 amp      10 10 amp      13 13 amp      15 15 amp      20 20 amp  
04 4 amp      06 6 amp      08 8 amp      12 12 amp      14 14 amp      16 16 amp

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

Dimensional Specifications: in. [mm]



Time Delay



| 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%     | 0.01 ~ 1.8 sec. |

| Time Trip Factor <sup>1</sup> |        |
|-------------------------------|--------|
| -10 °C                        | x 1.70 |
| -5 °C                         | x 1.60 |
| 0 °C                          | x 1.50 |
| 5 °C                          | x 1.40 |
| 10 °C                         | x 1.30 |
| 15 °C                         | x 1.20 |
| 20 °C                         | x 1.10 |
| 25 °C                         | x 1.00 |

| Time Trip Factor <sup>1</sup> |        |
|-------------------------------|--------|
| 30 °C                         | x 0.90 |
| 35 °C                         | x 0.85 |
| 40 °C                         | x 0.80 |
| 45 °C                         | x 0.75 |
| 50 °C                         | x 0.70 |
| 55 °C                         | x 0.65 |
| 60 °C                         | x 0.60 |

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

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