

# 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.



### Resources:

[Configure a Complete Part](#)

[Download CAD & Sales Drawing >](#)

### 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

### Applications:

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



# 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

<b>1 SERIES</b> <b>CMB</b>	<b>3 VOLTAGE</b> <b>3</b> 125-250VAC/ 32 VDC
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<b>2 RATING</b> <b>03</b> 3 amps <b>12</b> 12 amps <b>04</b> 4 amps <b>13</b> 13 amps <b>05</b> 5 amps <b>14</b> 14 amps <b>06</b> 6 amps <b>15</b> 15 amps <b>07</b> 7 amps <b>16</b> 16 amps <b>08</b> 8 amps <b>20</b> 20 amps	<b>4 MOUNTING HOLE</b> <b>11</b> 1 M11 <b>12</b> 2 M12 <b>00</b> 3 Snap In Style <b>27</b> 15 3/8" 27 UNS <b>28</b> 12 3/8" 27 UNS (double flatted)	
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**5 BUSHING**  
**PLASTIC**

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

**6 MOUNTING NUT 7**

<b>METAL</b> 	<b>METAL PAL</b> 	<b>PLASTIC</b> 	<b>HEX BOOT</b> 	
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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 7**

<b>N</b> None <b>A</b> Embossed Legend <b>B</b> Silver Printing on Black	
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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.
- 15 Available with G or J bushing only.

**8 BUTTON**

**B** Black                      **R** Red                      **W** White

**9 TERMINAL**

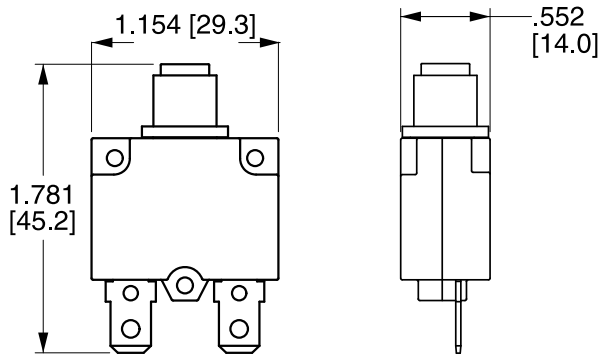
<b>A</b> Type A	<b>B</b> Type B	<b>C</b> Type C	<b>D</b> Type D	<b>E</b> Type E	<b>F</b> Type F	<b>G</b> Type G	<b>H</b> Type H	<b>J</b> Type J	<b>K</b> Type K	<b>R</b> Type R
F,G,H,J TERMINALS ARE 8-32 UNC										

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

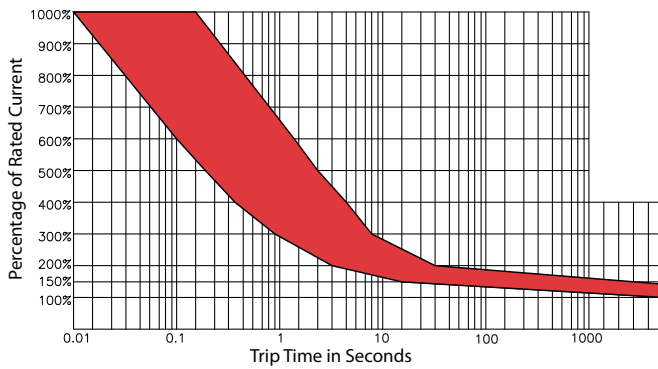
<b>03</b> 3 amp	<b>05</b> 5 amp	<b>07</b> 7 amp	<b>10</b> 10 amp	<b>13</b> 13 amp	<b>15</b> 15 amp	<b>20</b> 20 amp
<b>04</b> 4 amp	<b>06</b> 6 amp	<b>08</b> 8 amp	<b>12</b> 12 amp	<b>14</b> 14 amp	<b>16</b> 16 amp	

\*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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