

# 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

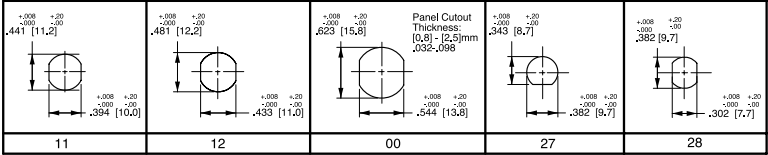


# CMB - 10 3 - 11 C 3 N - B - A /10

- |        |        |         |               |              |              |                 |        |          |                |
|--------|--------|---------|---------------|--------------|--------------|-----------------|--------|----------|----------------|
| 1      | 2      | 3       | 4             | 5            | 6            | 7               | 8      | 9        | 10             |
| Series | Rating | Voltage | Mounting Hole | Bushing Type | Mounting Nut | Indicator Plate | Button | Terminal | 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> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><b>03</b> 3 amps</td> <td style="width: 50%;"><b>12</b> 12 amps</td> </tr> <tr> <td><b>04</b> 4 amps</td> <td><b>13</b> 13 amps</td> </tr> <tr> <td><b>05</b> 5 amps</td> <td><b>14</b> 14 amps</td> </tr> <tr> <td><b>06</b> 6 amps</td> <td><b>15</b> 15 amps</td> </tr> <tr> <td><b>07</b> 7 amps</td> <td><b>16</b> 16 amps</td> </tr> <tr> <td><b>08</b> 8 amps</td> <td><b>20</b> 20 amps</td> </tr> </table>	<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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<b>5 BUSHING</b> <b>PLASTIC</b> <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  <b>METAL</b> <b>J</b> 8 Type J	<table style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <th colspan="7">PLASTIC</th> <th>METAL</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TYPE C</td> <td>TYPE D</td> <td>TYPE E</td> <td>TYPE H</td> <td>TYPE G</td> <td>TYPE K</td> <td>TYPE J</td> <td></td> </tr> </table>	PLASTIC							METAL									TYPE C	TYPE D	TYPE E	TYPE H	TYPE G	TYPE K	TYPE J	
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<b>6 MOUNTING NUT 7</b> <b>N</b> None <b>1</b> Type 1 <b>2</b> Type 2 <b>3</b> 11 Type 3 <b>4</b> Type 4 <b>5</b> Type 5 <b>6</b> 14 Type 6 <b>7</b> 9 Type 7 <b>8</b> 9 Type 8	<table style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <th>METAL</th> <th>METAL PAL</th> <th>PLASTIC</th> <th>HEX BOOT</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TYPE 1</td> <td>TYPE 2 / TYPE 6</td> <td>TYPE 3</td> <td>TYPE 5 / TYPE 8</td> </tr> </table>	METAL	METAL PAL	PLASTIC	HEX BOOT					TYPE 1	TYPE 2 / TYPE 6	TYPE 3	TYPE 5 / TYPE 8
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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.

<b>7 INDICATOR PLATE 7</b> <b>N</b> None <b>A</b> Embossed Legend <b>B</b> Silver Printing on Black  All indicator plates are marked "Suppl. Prot. press to reset".	<table style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <th>Embossed (ALUMINUM)</th> <th>Silver Printing On Black</th> </tr> <tr> <td></td> <td></td> </tr> </table>	Embossed (ALUMINUM)	Silver Printing On Black		
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Notes: All dimensions are in [mm]. Tolerance ±.005 [ .127] unless otherwise specified.

- |  |   |
|--|---|
| 1 Used with bushing C or D only.<br>2 Used with H bushing only.<br>3 Used with bushing E only.<br>4 Used with M11 mounting hole only.<br>5 Used with mounting hole 00 only.<br>6 Used with M12 mounting hole only.<br>7 All hardware available separately. Consult factory.<br>8 Available with mounting hole 27 only.<br>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)<br>11 Includes molded in "PRESS TO RESET" marking.<br>12 Available with K bushing only.<br>13 Available with mounting hole 28 only.<br>14 Thickness is 3.0 mm, .118 in.<br>15 Available with G or J bushing only. |
|--|---|

<b>8 BUTTON</b> <b>B</b> Black <b>R</b> Red <b>W</b> White
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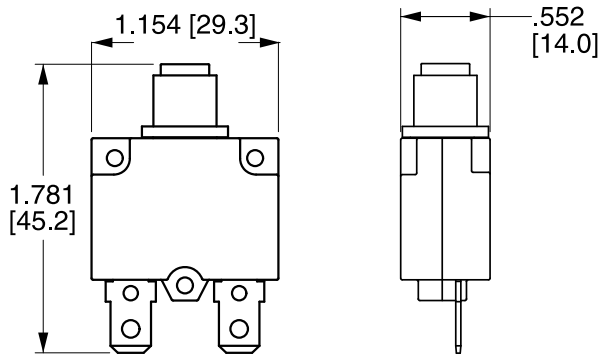
<b>9 TERMINAL</b> <b>A</b> Type A <b>B</b> Type B <b>C</b> Type C <b>D</b> Type D <b>E</b> Type E <b>F</b> Type F <b>G</b> Type G <b>H</b> Type H <b>J</b> Type J <b>K</b> Type K <b>R</b> Type R	<table style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Type A: Straight</td> <td>Type B: Line Pin</td> <td>Type C: Load Pin</td> <td>Type D: 90° Bend</td> <td>Type E: 90° Bend Backward</td> <td>Type F: Screw Terminal</td> <td>Type G: Mixed Terminals 90° Bend Line</td> <td>Type H: Screw Terminal 90° Bend</td> <td>Type J: Screw Terminal 90° Bend</td> <td>Type R: Screw Terminal without screw</td> <td>Type K: Mixed Terminals 90° Bend Load</td> </tr> </table>												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 screw	Type K: Mixed Terminals 90° Bend Load
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F,G,H,J TERMINALS ARE 8-32 UNC

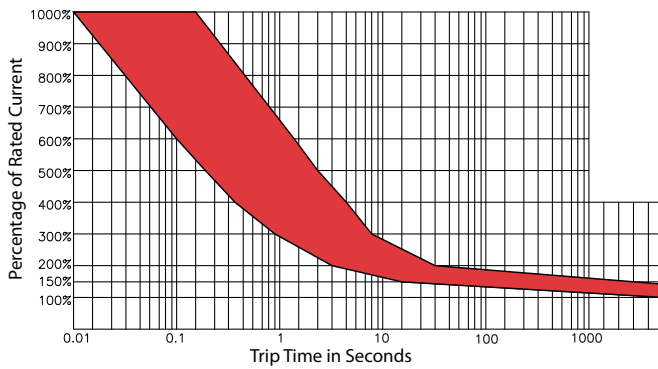
<b>10 BUTTON MARKING (IF BLANK, NO MARKING)<sup>10</sup></b>	Button Marking Orientation: line <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">20</span> load													
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%;"><b>03</b> 3 amp</td> <td style="width: 12.5%;"><b>05</b> 5 amp</td> <td style="width: 12.5%;"><b>07</b> 7 amp</td> <td style="width: 12.5%;"><b>10</b> 10 amp</td> <td style="width: 12.5%;"><b>13</b> 13 amp</td> <td style="width: 12.5%;"><b>15</b> 15 amp</td> <td style="width: 12.5%;"><b>20</b> 20 amp</td> </tr> <tr> <td><b>04</b> 4 amp</td> <td><b>06</b> 6 amp</td> <td><b>08</b> 8 amp</td> <td><b>12</b> 12 amp</td> <td><b>14</b> 14 amp</td> <td><b>16</b> 16 amp</td> <td></td> </tr> </table>	<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	
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\*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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Innovative Designs. Powerful Solutions.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Поставка более 17-ти миллионов наименований электронных компонентов;
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- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
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- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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