# 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 Complaint

Carling Technologies®
Innovative Designs. Powerful Solutions.

**Carling Technologies, Inc.**
60 Johnson Avenue, Plainville, CT 06062
**Email:** sales@carlingtech.com
**Application Support:** team2@carlingtech.com
**Phone:** 860.793.9281 **Fax:** 860.793.9231

*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 |
|---|---|---|---|---|---|---|---|---|---|
| CMB | 10 | 3 | 11 | C | 3 | N | B | A | /10 |

## 1 SERIES
**CMB**

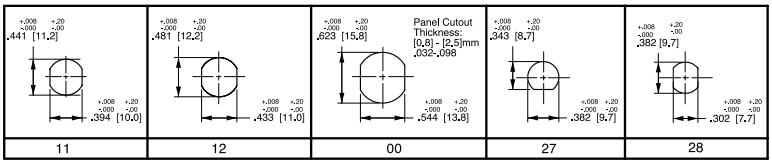
## 3 VOLTAGE
**3** 125-250VAC/ 32 VDC

## 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** [1] | M11 |
| **12** [2] | M12 |
| **00** [3] | Snap In Style |
| **27** [15] | 3/8" 27 UNS |
| **28** [12] | 3/8" 27 UNS (double flatted) |



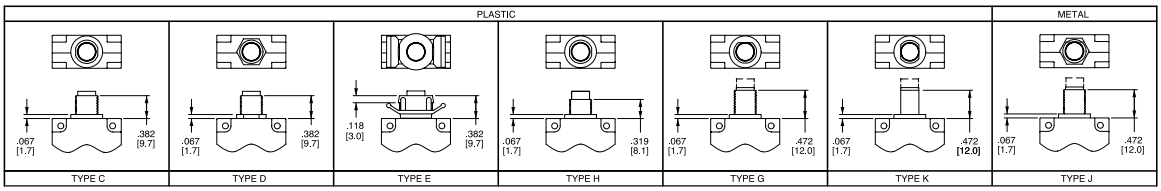

## 5 BUSHING

**PLASTIC**

| | |
|---|---|
| **C** [4] | Type C |
| **D** [4] | Type D |
| **E** [5] | Type E |
| **G** [8] | Type G |
| **H** [6] | Type H |
| **K** [13] | Type K |

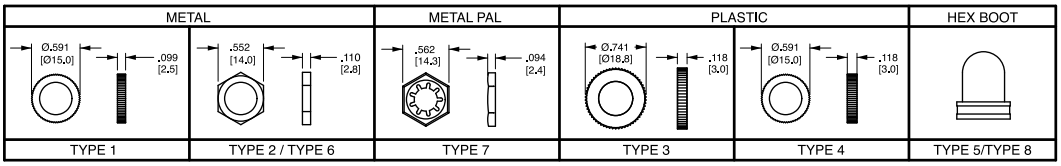
**METAL**

| | |
|---|---|
| **J** [8] | Type J |




## 6 MOUNTING NUT [7]

| | |
|---|---|
| **N** | None |
| **1** | Type 1 |
| **2** | Type 2 |
| **3** [11] | Type 3 |
| **4** | Type 4 |
| **5** | Type 5 |
| **6** [14] | Type 6 |
| **7** [9] | Type 7 |
| **8** [9] | Type 8 |

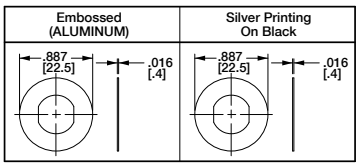



NOTE: Type 5 is clear hex boot. Type 8 is black hex boot (available for bushings G, J & K only); Type 3 nut includes molded in "PRESS TO RESET" marking.

## 7 INDICATOR PLATE [7]

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

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




## 8 BUTTON

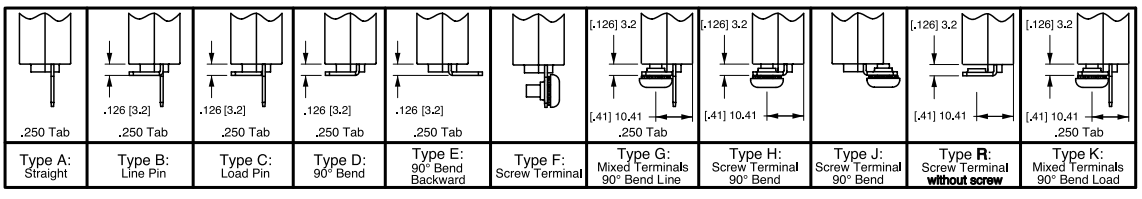
| | | | | | |
|---|---|---|---|---|---|
| **B** | Black | **R** | Red | **W** | White |

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.

## 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)[10]

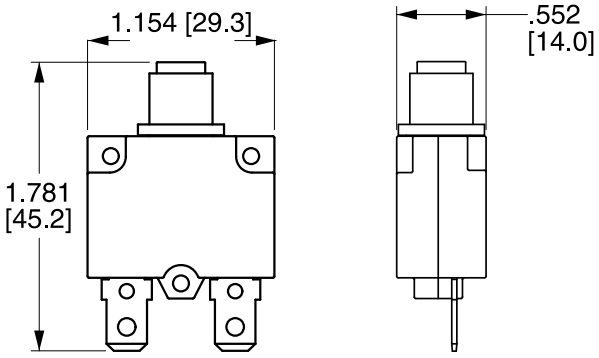
Button Marking Orientation: line (20) load

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **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 | | |

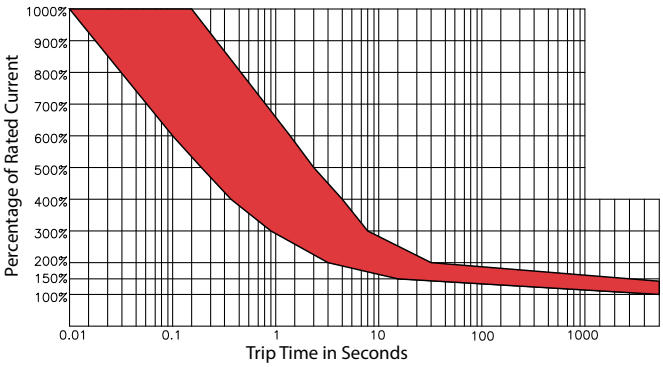
*Manufacturer reserves the right to change product specification without prior notice.

Email: sales@carlingtech.com Application Support: team2@carlingtech.com
Phone: (860) 793–9281 Fax: (860) 793–9231 **www.carlingtech.com**

## 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 [1] | |
|---|---|
| -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 [1] | |
|---|---|
| 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.

## Authorized Sales Representatives and Distributors

Click on a region of the map below to find your local representatives and distributors or visit ***www.carlingtech.com/findarep***.

## About Carling

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 four 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.**

To view all of Carling's environmental, quality, health & safety certifications please visit **www.carlingtech.com/environmental-certifications**

## Worldwide Headquarters

Carling Technologies, Inc.
60 Johnson Avenue, Plainville, CT 06062
**Phone:** 860.793.9281 **Fax:** 860.793.9231
**Email:** sales@carlingtech.com

**Northern Region Sales Office:** nrsm@carlingtech.com
**Southeast Region Sales Office:** sersm@carlingtech.com
**Midwest Region Sales Office:** mrsm@carlingtech.com
**West Region Sales Office:** wrsm@carlingtech.com
**Latin America Sales Office:** larsm@carlingtech.com

## Asia-Pacific Headquarters

Carling Technologies, Asia-Pacific Ltd.,
Suite 1607, 16/F Tower 2, The Gateway,
Harbour City, 25 Canton Road,
Tsimshatsui, Kowloon, Hong Kong
**Phone:** Int + 852-2737-2277 **Fax:** Int + 852-2736-9332
**Email:** sales@carlingtech.com.hk

**Shenzhen, China:** shenzhen@carlingtech.com
**Shanghai, China:** shanghai@carlingtech.com
**Pune, India:** india@carlingtech.com
**Kaohsiung, Taiwan:** taiwan@carlingtech.com
**Yokohama, Japan:** japan@carlingtech.com

## Europe | Middle East | Africa Headquarters

Carling Technologies LTD
4 Airport Business Park, Exeter Airport,
Clyst Honiton, Exeter, Devon, EX5 2UL, UK
**Phone:** Int + 44 1392.364422 **Fax:** Int + 44 1392.364477
**Email:** ltd.sales@carlingtech.com

**Germany:** gmbh@carlingtech.com
**France:** sas@carlingtech.com

Carling Technologies®
Innovative Designs. Powerful Solutions.

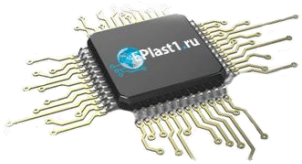
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- 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;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- 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.




**Как с нами связаться**

**Телефон:** 8 (812) 309 58 32 (многоканальный)
**Факс:** 8 (812) 320-02-42
**Электронная почта:** org@eplast1.ru
**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.