

# CLB-Series

## THERMAL CIRCUIT BREAKERS

The CLB-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 3-60A, 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



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

[www.carlingtech.com](http://www.carlingtech.com)

# CLB - 10 3 - 12 C 3 B - B - A / 10

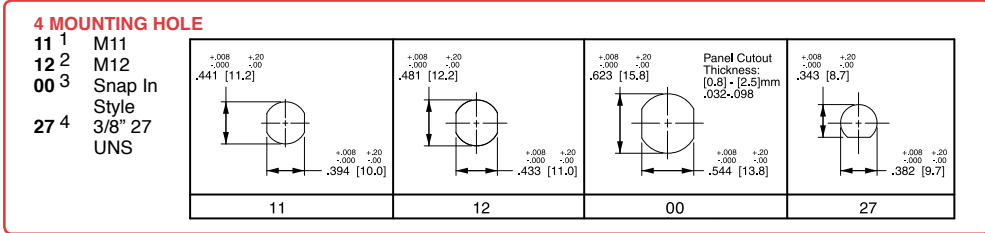
1 Series
2 Rating
3 Voltage
4 Mounting Hole
5 Bushing Type
6 Mounting Nut
7 Indicator Plate
8 Button
9 Terminal
10 Button Marking

**1 SERIES**  
CLB

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

**2 RATING**

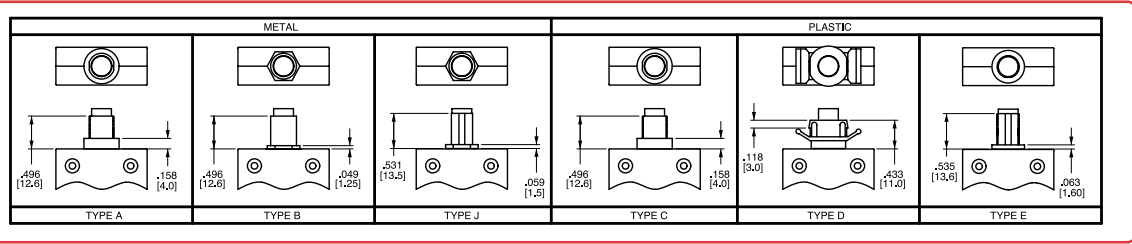
03	3 amps	15	15 amps
04	4 amps	18	18 amps
05	5 amps	20	20 amps
06	6 amps	25	25 amps
07	7 amps	30	30 amps
08	8 amps	35	35 amps
10	10 amps	40	40 amps
12	12 amps	50 <sup>12</sup>	50 amps
13	13 amps	60 <sup>12</sup>	60 amps



**5 BUSHING**

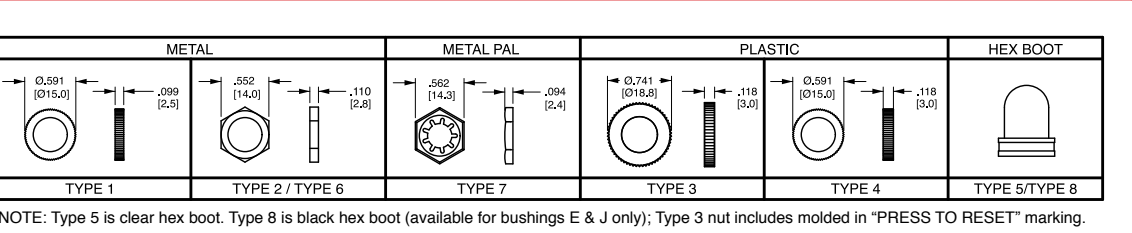
**METAL**  
A<sup>6</sup> Type A  
B<sup>16</sup> Type B  
J<sup>8</sup> Type J

**PLASTIC**  
C<sup>5</sup> Type C  
D<sup>7</sup> Type D  
E<sup>8</sup> Type E



**6 MOUNTING NUT 9**

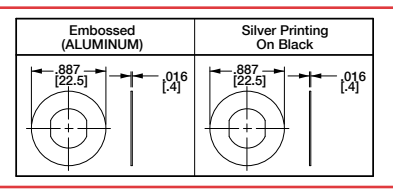
N None  
1 Type 1  
2 Type 2  
3<sup>17</sup> Type 3  
4 Type 4  
5 Type 5  
6<sup>4, 14</sup> Type 6  
7<sup>4</sup> Type 7  
8<sup>4</sup> Type 8



**7 INDICATOR PLATE 9**

N None  
A Embossed  
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.

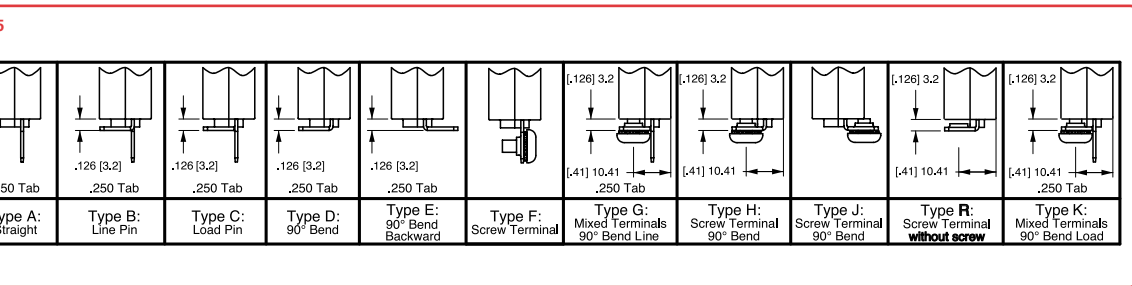
1 Used with bushing A or B only.	11 Terminals are .040 [1.0] thickness for ratings greater than 35 amps. Terminals are .315 [0.8] thickness is for ratings less than 35 amps.
2 Used with bushing A or C only.	12 Available only with 10-24 unc. screw terms. (select type F, G, H, J only.) UL, CUL only.
3 Used with bushing D only.	13 Amp rating must match button marking (ex: "20" will be marked on the button of the breaker)
4 Used with bushing E & J only.	14 Thickness is 3.0 mm, .118 in.
5 Used with M12 mounting hole only.	15 Screw terminals are 8-32 UNC
6 Used with M11 and M12 mounting hole only.	16 Used with M11 mounting hole only.
7 Used with mounting hole 00 only.	17 Includes molded in "PRESS TO RESET" marking.
8 Used with 27 mounting hole only.	
9 All hardware available separately.	
10 Greater than 35 amp rating must use solder joint to connect wire to non-screw type terminals.	

**8 BUTTON**

B Black                      R Red                      W White

**9 TERMINAL 10,11,15**

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  
J Type K  
R Type R



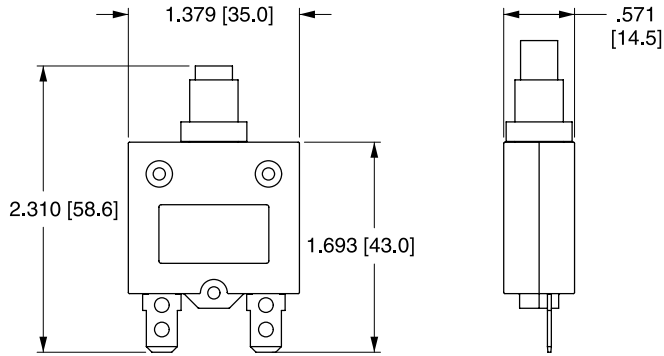
**10 BUTTON MARKING (IF BLANK, NO MARKING)<sup>13</sup>** Button Marking Orientation: line load

03 3 amp	06 6 amp	10 10 amp	15 15 amp	25 25 amp	40 40 amp
04 4 amp	07 7 amp	12 12 amp	18 18 amp	30 30 amp	50 50 amp
05 5 amp	08 8 amp	13 13 amp	20 20 amp	35 35 amp	60 60 amp

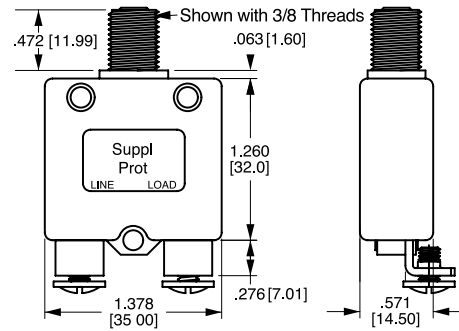
\*Manufacturer reserves the right to change product specification without prior notice.

### Dimensional Specifications: in. [mm]

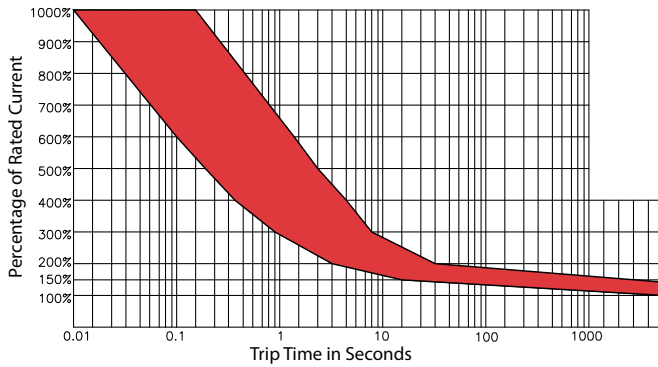
#### 3-40A Construction



#### 50 & 60A Construction



### 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.

## 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](http://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 ISO 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](http://www.carlingtech.com/company-profile).

To view all of Carling's environmental, quality, health & safety certifications please visit [www.carlingtech.com/environmental-certifications](http://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.