

# CLB

## CLB-Series

### THERMAL CIRCUIT PROTECTORS

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.



#### Product Highlights:

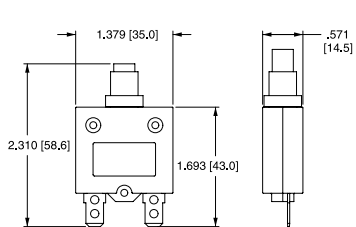
- Ratings from 3-60A, 125, 250VAC, 32VDC
- 2500 VAC/1 minute
- 60°C Max Operating Temperature
- 2500A @ 32VDC Interrupting Capacity
- 100M ohms Insulation Resistance
- Voltage drop <0.25 V
- UL, CUL, CSA, TUV, CE
- UL1500/ISO8846 for ignition protection/marine

#### Applications:

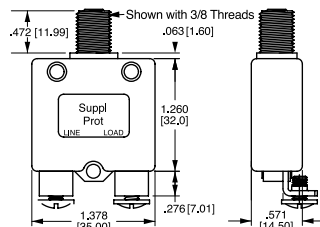
- Household Appliances
- Transportation
- Marine
- Power Strips
- Medical Equipment
- Audio Visual Equipment
- Power Supplies
- **ROHS Compliant**

#### Dimensional Specifications: in. [mm]

##### 3-40A Construction



##### 50 & 60A Construction



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

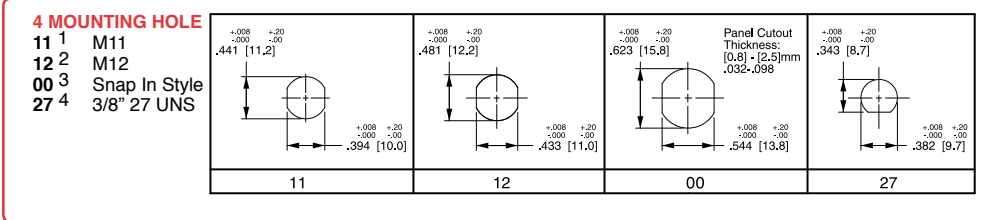
1 Series      2 Rating      3 Voltage      4 Mounting Hole      5 Bushing Type      6 Mounting Nut      7 Indicator Plate      8 Button      9 Terminal      10 Button Marking

**1 SERIES**  
CLB

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

**2 RATING**

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



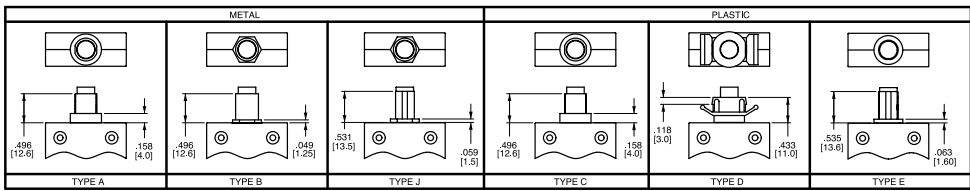
**5 BUSHING**

**METAL**

A 6 Type A  
B 6 Type B  
J 8 Type J

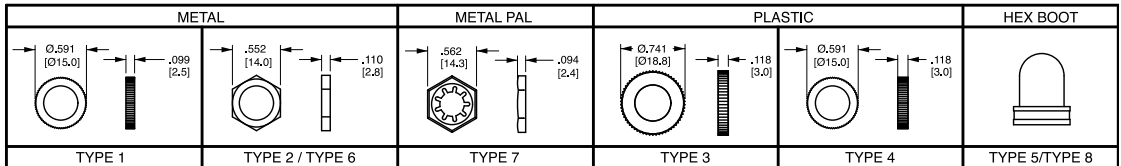
**PLASTIC**

C 5 Type C  
D 7 Type D  
E 8 Type E



**6 MOUNTING NUT 9**

N None  
1 Type 1  
2 Type 2  
3 Type 3  
4 Type 4  
5 Type 5  
6 4, 14 Type 6  
7 4 Type 7  
8 4 Type 8

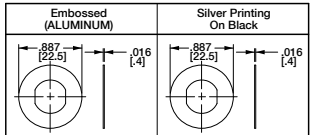


NOTE: Type 5 is clear hex boot. Type 8 is black hex boot (available for bushings E & J only); Type 3 nut includes molded in "PRESS TO RESET" marking.

**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.

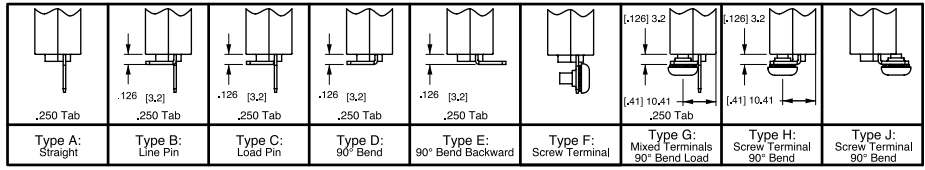
- Used with bushing A or B only.
- Used with bushing C only.
- Used with bushing D only.
- Used with bushing E & J only.
- Used with M12 mounting hole only.
- Used with M11 mounting hole only.
- Used with mounting hole 00 only.
- Used with 27 mounting hole only.
- All hardware available separately. Consult factory.
- > 35 amp ratings must use solder joint to connect wire to non-screw type terminals.
- Terminals are .040 [1.0] thickness for ratings > 35, & .315 [8] thickness is for ratings < 35 amps.
- Available only with 10-24 unc. screw terms. (select type F, G, H, J only.) UL, CUL only.
- Amp rating must match button marking (ex: "20" will be marked on the button of the breaker)
- Thickness is 3.0 mm, .118 in.
- Screw terminals are 8-32 UNC

**8 BUTTON**

B Black      R Red      W White

**9 TERMINAL 10,11,15**

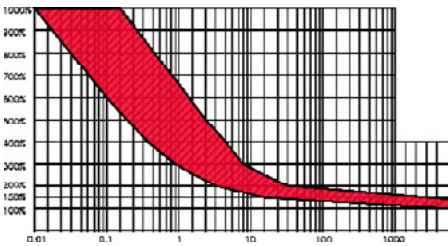
A Type A      F Type F  
B Type B      G Type G  
C Type C      H Type H  
D Type D      J Type J  
E Type E



**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

**Time Delay**



Derating Factor		Derating Factor		Overload	Trip Time
-10 °C	x 1.70	30 °C	x 0.90	100%	No Trip
-5 °C	x 1.60	35 °C	x 0.85	150%	Trip in 1 hr
0 °C	x 1.50	40 °C	x 0.80	200%	4.0 ~ 40 sec.
5 °C	x 1.40	45 °C	x 0.75	300%	0.9 ~ 8.0 sec.
10 °C	x 1.30	50 °C	x 0.70	400%	.42 ~ 5.0 sec.
15 °C	x 1.20	55 °C	x 0.65	500%	.25 ~ 3.0 sec.
20 °C	x 1.10	60 °C	x 0.60	600%	.01 ~ 1.8 sec.
25 °C	x 1.00				

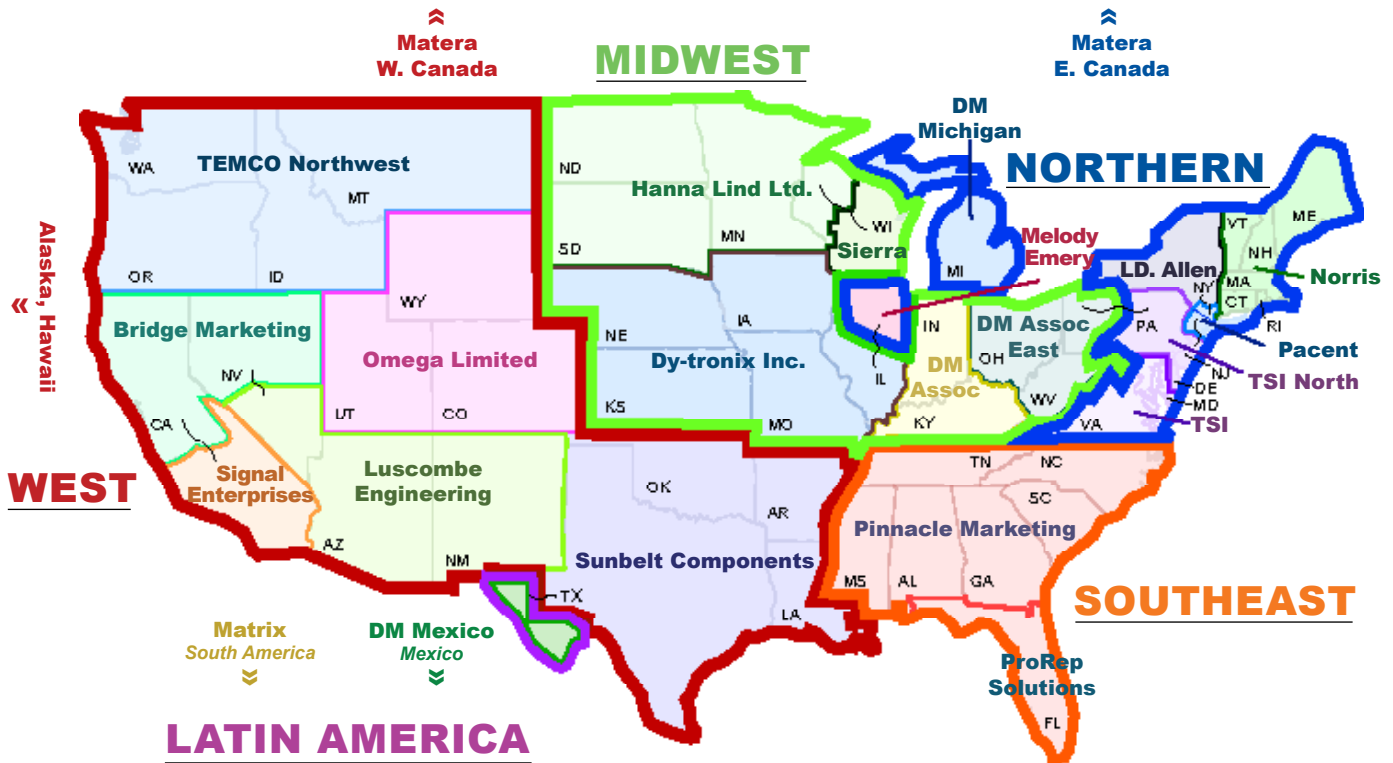
Notes:  
Breaker must hold 100% of rated current and must trip at 150% and above, within the time limits shown in curve. Trip times specified at 25° ambient with no preloading.

1 To adjust the breaker rating for ambient temperature multiply the breaker rating by the factor. (ex: 5 amp rating at 0°C: 5 x .67 = 3.3 amp. Select 3 amp rating.)

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

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