

CLB-Series

THERMAL CIRCUIT PROTECTORS

Rating:

3 to 60A, 125-250VAC, 32VDC

Approvals:

UL, CUL, CSA, TUV, CE
UL1500/ISO8846 for ignition
protection/marine

Dielectric Strength:

2500 VAC/1 minute

Interrupting capacity:

2500 amps @ 32 VDC

Insulation Resistance:

100M ohms

Operating Temperature:

-10°C to 60°C

Voltage drop:

< 0.25 V

Applications:

Household Appliances
Transportation
Marine
Power Strips
Medical Equipment
Audio Visual Equipment
Power Supplies

ROHS Compliant

A COMPACT, SINGLE POLE, PUSH-TO-RESET
FAMILY OF THERMAL CIRCUIT BREAKERS

Dimensional Specifications:

3-40A Construction



50 & 60A Construction



Carling Technologies®

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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

2 RATING

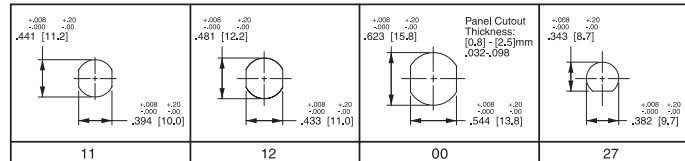
03	3 amp	15	15 amp
04	4 amp	18	18 amp
05	5 amp	20	20 amp
06	6 amp	25	25 amp
07	7 amp	30	30 amp
08	8 amp	35	35 amp
10	10 amp	40	40 amp
12	12 amp	50 ¹³	50 amp
13	13 amp	60 ¹³	60 amp

3 VOLTAGE

3 125-250VAC/ 32 VDC

4 MOUNTING HOLE

11¹ M11
12² M12
00³ Snap In Style
27⁹ 3/8" 27 UNS



5 BUSHING

METAL

A⁵ Type A

B⁶ Type B

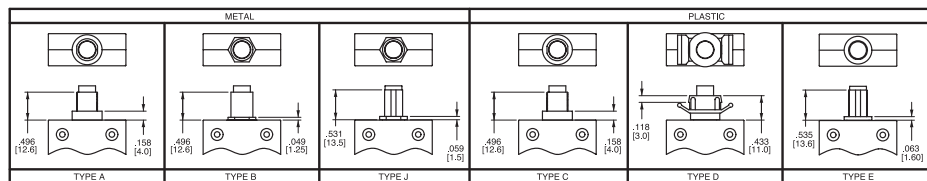
J⁸ Type J

PLASTIC

C⁵ Type C

D⁷ Type D

E⁸ Type E



6 MOUNTING NUT⁹

N None

1 Type 1

2 Type 2

3 Type 3

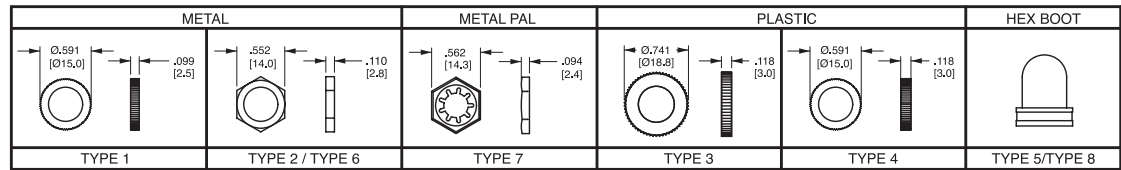
4 Type 4

5 Type 5

6^{12,15} Type 6

7¹² Type 7

8¹² 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 PLATE⁹

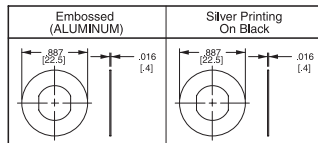
N None

A Embossed

B Silver Printing

on Black

All indicator plates are marked "circuit breaker press to reset".



Notes: All dimensions are in [mm]. Tolerance $\pm .005$ [0.127] unless otherwise specified.

1 Used with bushing A or B only.

2 Used with bushing C only.

3 Used with bushing D only.

4 Used with bushing E & J only.

5 Used with M12 mounting hole only.

6 Used with M11 mounting hole only.

7 Used with mounting hole 00 only.

8 Used with 27 mounting hole only.

9 All hardware available separately. Consult factory.

10 > 35 amp ratings must use solder joint to connect wire to non-screw type terminals.

11 Terminals are .040 [1.0] thickness for ratings > 35 amp.

12 Available with type E or J bushing only.

13 Available only with 10-24 unc. screw terms. (select type F, G, H, J only.) UL, CUL only.

14 Amp rating must match button marking (ex: "20" will be marked on the button of the breaker)

15 Thickness is 3.0 mm, .118 in.

16 Screw terminals are 8-32 UNC

8 BUTTON

B Black

R Red

W White

9 TERMINAL^{10,11,16}

A Type A

B Type B

C Type C

D Type D

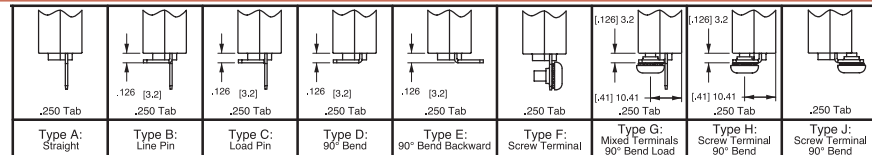
E Type E

F Type F

G Type G

H Type H

J Type J

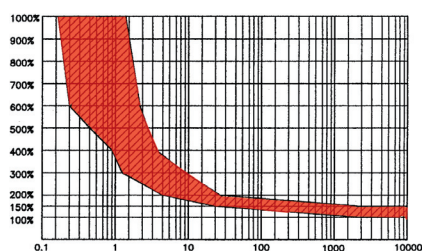


10 BUTTON MARKING (IF BLANK, NO MARKING.)¹⁴ Button Marking Orientation:

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



CORRECTION FACTOR ¹	
0°C	x .67
10°C	x .72
15°C	x .83
18°C	x .87
25°C	x 1.00
32°C	x 1.05
40°C	x 1.18
50°C	x 1.33
60°C	x 1.67

OVERLOAD	TRIP TIME
100%	NO TRIP
150%	TRIP IN 1 HR.
200%	5 - 35 SEC.
300%	1 - 10 SEC.
400%	.45 - 5.5 SEC.
600%	.1 - 20 SEC.

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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