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.

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 Complaint

Resources:
- Configure a Complete Part
- Download CAD & Sales Drawing

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### CLB-Series - Ordering Scheme

#### 1 SERIES
- CLB

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

#### 2 RATING
- 03: 3 amps
- 04: 4 amps
- 05: 5 amps
- 06: 6 amps
- 07: 7 amps
- 08: 8 amps
- 10: 10 amps
- 12: 12 amps
- 13: 13 amps

#### 4 MOUNTING HOLE
- 11: Snap In Style
- 12: 3/8" 27 UNS

#### 5 BUSHING
- Type A
- Type B
- Type J
- Type C
- Type D
- Type E
- Type F
- Type G
- Type H
- Type J
- Type K
- Type R

#### 7 INDICATOR PLATE
- Embossed (ALUMINUM)
- Silver Printing On Black

#### 8 BUTTON
- B: Black
- R: Red
- W: White

#### 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

#### 10 BUTTON MARKING (IF BLANK, NO MARKING)
- 03: 3 amp
- 04: 4 amp
- 05: 5 amp

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*Manufacturer reserves the right to change product specification without prior notice.*
### Dimensional Specifications: in. [mm]

#### 3-40A Construction

Dimensions:
- 2.310 [58.6]
- 1.379 [35.0]
- 1.693 [43.0]

#### 50 & 60A Construction

Dimensions:
- Shown with 9/8 Threads
- 0.67 [17.1]
- 0.57 [14.5]

### Time Delay

#### Overload Trip Time

<table>
<thead>
<tr>
<th>Overload</th>
<th>Trip Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>No Trip</td>
</tr>
<tr>
<td>150%</td>
<td>Trip in 1 hr</td>
</tr>
<tr>
<td>200%</td>
<td>4.0 ~ 40 sec.</td>
</tr>
<tr>
<td>300%</td>
<td>0.9 ~ 8.0 sec.</td>
</tr>
<tr>
<td>400%</td>
<td>0.42 ~ 5.0 sec.</td>
</tr>
<tr>
<td>500%</td>
<td>0.25 ~ 3.0 sec.</td>
</tr>
<tr>
<td>600%</td>
<td>0.01 ~ 1.8 sec.</td>
</tr>
</tbody>
</table>

#### Time Trip Factor $^1$

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>-10 °C</td>
<td>1.70</td>
</tr>
<tr>
<td>-5 °C</td>
<td>1.60</td>
</tr>
<tr>
<td>0 °C</td>
<td>1.50</td>
</tr>
<tr>
<td>5 °C</td>
<td>1.40</td>
</tr>
<tr>
<td>10 °C</td>
<td>1.30</td>
</tr>
<tr>
<td>15 °C</td>
<td>1.20</td>
</tr>
<tr>
<td>20 °C</td>
<td>1.10</td>
</tr>
<tr>
<td>25 °C</td>
<td>1.00</td>
</tr>
</tbody>
</table>

#### Time Trip Factor $^1$

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 °C</td>
<td>0.90</td>
</tr>
<tr>
<td>35 °C</td>
<td>0.85</td>
</tr>
<tr>
<td>40 °C</td>
<td>0.80</td>
</tr>
<tr>
<td>45 °C</td>
<td>0.75</td>
</tr>
<tr>
<td>50 °C</td>
<td>0.70</td>
</tr>
<tr>
<td>55 °C</td>
<td>0.65</td>
</tr>
<tr>
<td>60 °C</td>
<td>0.60</td>
</tr>
</tbody>
</table>

**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
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