WCB Series

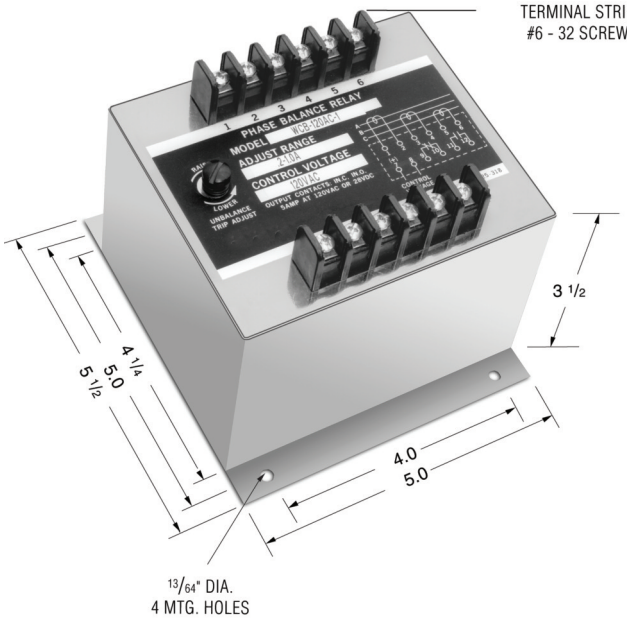
Product Facts

- **Function 60 or 87**
- **ANSI/IEEE C37.90-1978**
- **UL File No. E58048**
- **CSA File No. LR61158**

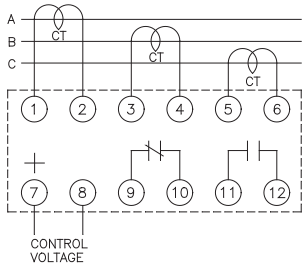
Current Balance Relays are designed to sense unbalanced current flow in a three phase system. The primary application of Current Balance Relays is to protect three phase motors against phase unbalance or phase failure.

Operation

With control voltage applied to the relay, the output contacts will energize when the three phase currents are balanced (including zero currents), and will be de-energize by unbalance currents.



Note: Dimensions in inches. Multiply values by 25.4 for dimensions in mm.



Product Specifications

Line Current — Three Phase, AC current, 50-400 Hz Direct or from CT.
5 amp continuously
20 amp, 30 sec.
200 amp, 0.10 sec.

Control Voltage — See Ordering Information

Unbalanced Trip Point — Screwdriver adjustable. Adjustment range in accordance with ordering information. (The unbalanced value is defined as the difference between the highest and the lowest phase current).

Drop-Out Time Delay — 0.9 to 1.3 seconds

Surge Withstand Capability — In compliance with C37.90B ANSI/IEEE

Operating Temperature — -40°C to +70°C

Burden — Current input — 5.0 VA, Phase Control voltage — 3.0 VA

Contact Ratings — One set, N.O., One set N.C.
5 amp resistive at 120 VAC or 28 VDC

Notes:
1. Remove black screw for access to the trip adjustment.
2. Clockwise rotation of the adjustment potentiometer will raise the unbalance trip point.
3. The output contacts are shown de-energized.

Ordering Information

Sample Part Number ▶ **WCB -120AC -1 -A**

Type:
WCB = Current Balance

Control Voltage (± 15%)
26 DC
48 DC
125 AC
120 AC
230 AC
380 AC
460 AC

Trip Adjustment Range
.5 = 0.1 amp to 0.5 amps
1 = 0.2 amp to 1 amp
2 = 0.4 amp to 2 amp

Options:
A = two normally open contacts
B = two normally closed contacts

Catalog 5-1773450-5
Revised 3-13

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Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

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