MODEL 200

3-Phase Voltage Unbalance Monitor



- **Detects Unbalanced Voltages**
- **Percent of Unbalance Adjustment**
- **Automatic Reset**

DESCRIPTION

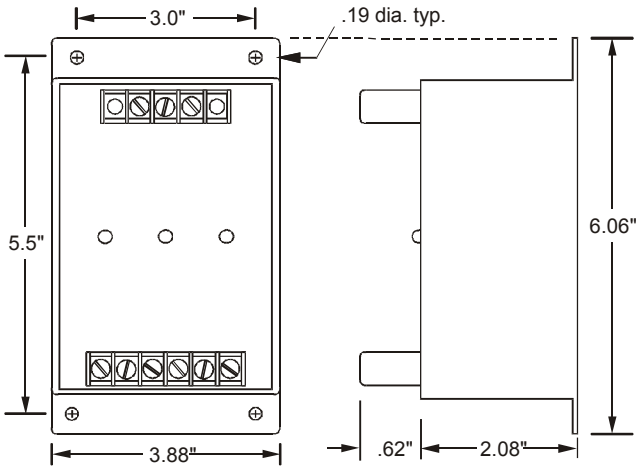
The Model 200 3-Phase Voltage Unbalance Monitor is designed to continuously monitor a three-phase line for unbalanced voltage conditions.

This device will only energize the relay if an unbalance exists. Zero volts on all three phases is considered a balanced condition. This allows the Model 200 to be used with shunt breakers, so that main power can be restored without resetting breakers.

The solid-state sensing circuit drives an internal electromechanical relay. Indicator lights on the monitor show when the voltage balance is within an acceptable range; when an unbalance exists; and when the relay is actually tripped.

When an acceptable voltage balance is reapplied, the Model 200 will automatically reset the relay.

DIMENSIONS



SPECIFICATIONS

Model	A200	B200A	B200B	C200	D200	EX200
Nominal AC Voltages	120VAC	208VAC	240VAC	480VAC	575VAC	380VAC
Voltage Range	± 15%	± 15%	± 15%	± 15%	+5 to -15%	± 15%
Frequency	60Hz	60Hz	60Hz	60Hz	60Hz	50Hz
Power Consumption (per phase)	0.5W	1W	1W	2W	2W	2W
Transient Protection	2500VRMS for 10msec					
Repeat Accuracy	± 0.1% (fixed conditions)					
Unbalance Adjustment	2% to 10%					
Response Time	100 msec					
Reset Time	Fixed 1 sec					
Dropout Time	Adjustable 0.2 to 20 seconds					
Reset Type	Automatic					
Dead Band	0.5% max					
Contact Rating	DPDT 10 amps at 240VAC resistive					
Expected Relay Life	Mech: 10 million operations Elec: 100,000 operations at rated load					
Operating Temp	- 40° to +131° F					
Humidity Tolerance	0-97% w/o condensation					
Mounting	Surface					
Enclosure Material	ABS plastic					
Weight	10 oz.					

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Fax: (918) 437-7584

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MODEL 200 3-Phase Voltage Unbalance Monitor

READ ALL INSTRUCTIONS BEFORE INSTALLING, OPERATING OR SERVICING THIS DEVICE.
KEEP THIS DATA SHEET FOR FUTURE REFERENCE.

GENERAL SAFETY

POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE MODEL 200.
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

Installation Instructions

INSTALLATION

Set PERCENT OF UNBALANCE fully clockwise.

Set TRIP DELAY IN SECONDS fully counter-clockwise.

Connect the 3-phase wires to the terminals marked 'A', 'B' and 'C'.

Connect the control wires to the terminals with the relay contact markings. The contact markings on the unit are the NORMAL or OFF condition of the contacts.

Apply power. NORMAL indicator should be ON.

ADJUSTMENT

Rotate the PERCENT OF UNBALANCE adjustment pot to the desired setting.

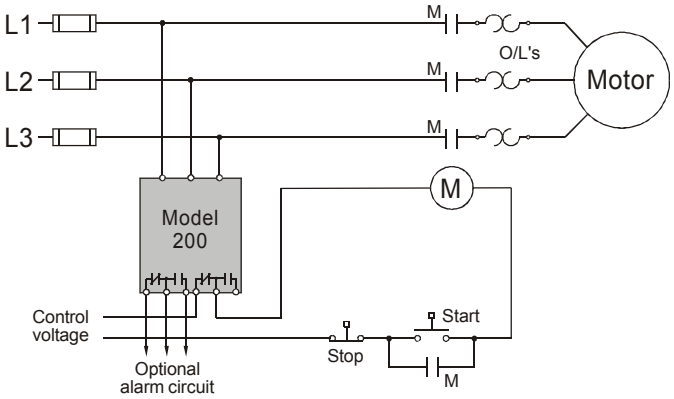
Set the TRIP DELAY adjustment to the desired amount of delay to prevent nuisance trips.

Should nuisance trips occur, increase the TRIP DELAY IN SECONDS setting. Any adjustments should be made in very small increments.

WARRANTY

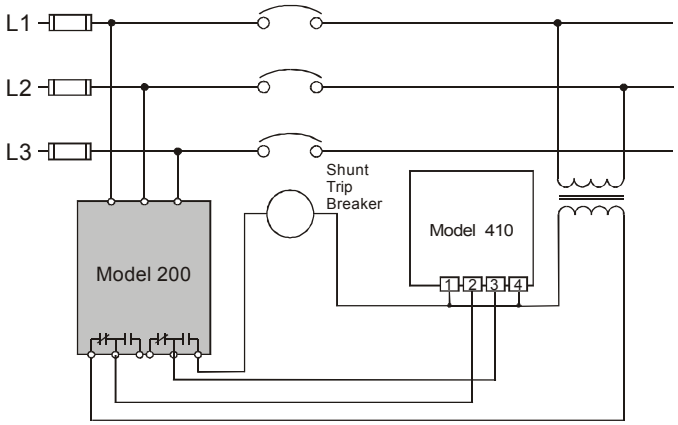
The **Model 200 3-Phase Voltage Unbalance Monitor** is covered by Time Mark Corporation's exclusive **5-Year Unconditional Warranty.** Should this device fail, for any reason, within five years from the date of purchase, we will repair or replace it free. Contact the Time Mark Sales department, Monday through Friday; 8 a.m. to 5 p.m., CST, for further details.

TYPICAL MOTOR APPLICATION



Shows No Power Applied

TYPICAL SHUNT BREAKER APPLICATION



Shows No Power Applied

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