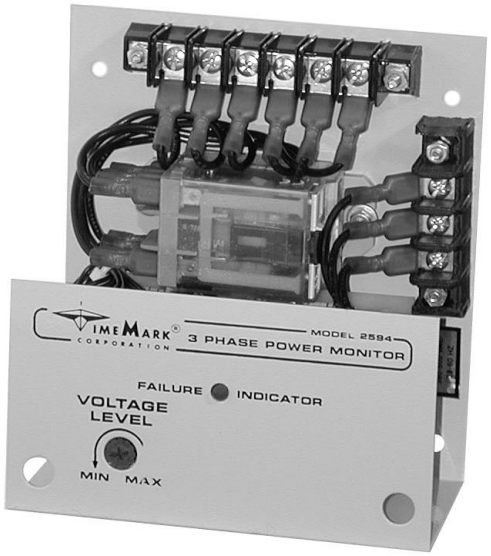
MODEL 2594

3-Phase Monitor



- **DPDT 600VAC Output Contacts**
- **Adjustable Failure Level**
- **Automatic Reset**
- **5 Year Unconditional Warranty**

DESCRIPTION

The **Model 2594 3-Phase Monitor** is designed for use with applications which require high control voltage (up to 600VAC). The Model 2594 protects 3-phase equipment and motors from phase loss, phase reversal and low voltage. When the correct voltage and phase rotation are applied, an internal DPDT relay energizes.

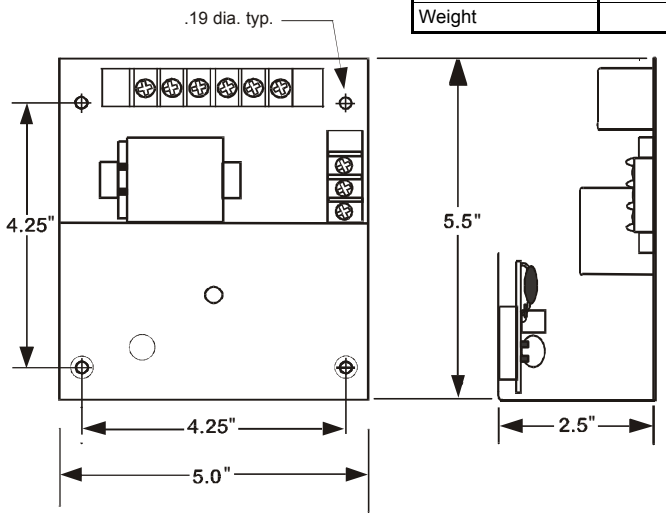
A fault condition drops out the relay and the FAILURE INDICATOR L E D illuminates. When the existing fault is corrected the unit will automatically reset. The Model 2594 can detect a phase loss condition even when regenerative voltage is present. It may be used with WYE or Delta systems; no neutral connection required.

Standard operating ranges are available from 120 to 575VAC, 60 Hz and 380VAC, 50 Hz.

SPECIFICATIONS

Model	A2594	B2594	C2594	D2594	EX2594
Nominal AC Voltage (phase to phase)	120VAC	208/240VAC	480VAC	575VAC	380VAC
Adjustment Range	85-125	160-260	380-500	450-600	300-400
Frequency	60 Hz				50 Hz
Power Consumption	2.1W	3.3W	4.2W	6.9W	4.2W
Transient Protection	2500V for 10 msec				
Repeat Accuracy	± 0.1% (fixed conditions)				
Response Time	0.05 seconds (fixed)				
Reset Time	0.05 seconds (fixed)				
Reset Type	Automatic				
Output Contacts	DPDT	3A at 480/600 VAC 80% PF 10A at 240 VAC 80% PF resistive			
Expected Relay Life		Mech: 10 million operations Elec: 100,000 at rated load			
Operating Temp	- 40° to +131° F				
Humidity Tolerance	0-97% w/o condensation				
Enclosure Material	20 gauge steel				
Mounting	Surface				
Weight	17 oz.				

DIMENSIONS



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Doc No. 87A394 12/00

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MODEL 2594 3-Phase 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 2594. ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING. THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

Installation Instructions

INSTALLATION

Connect the 3-phase wiring to the terminals marked **L1**, **L2**, **L3**.

Connect the control wiring to the terminals with the contact markings (refer to the diagram on the unit). The markings shown on the unit are the failed condition of the contacts.

Apply power.

If the contacts do not transfer (FAILURE INDICATOR-On), check that all three phases are present and of the correct voltage.

If all phases are correct, rotate the VOLTAGE LEVEL adjustment counter-clockwise to the MIN position. If the contacts still do not transfer, remove power from the unit.

Reverse two of the three input wires and re-apply power. The contacts should transfer to the normal condition (normally-open contacts closed, FAILURE INDICATOR-Off).

ADJUSTMENT

Note: During adjustment you may wish to install a jumper across the control contacts to prevent cycling the load on and off.

Rotate the VOLTAGE LEVEL adjustment slowly clockwise until the contacts transfer to the failed condition (FAILURE INDICATOR-On). Slowly turn the adjustment counter-clockwise until the contacts reset to the normal condition (FAILURE INDICATOR-Off).

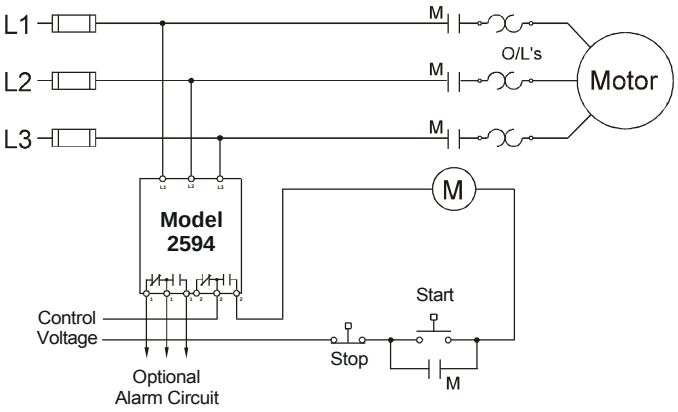
Remove the jumper, if installed.

This setting will be correct for most applications. If nuisance tripping occurs, turn the VOLTAGE LEVEL slightly farther counter-clockwise.

Any adjustments to the VOLTAGE LEVEL, to eliminate nuisance tripping, should be made in very small increments, until the true nuisance trips are eliminated.

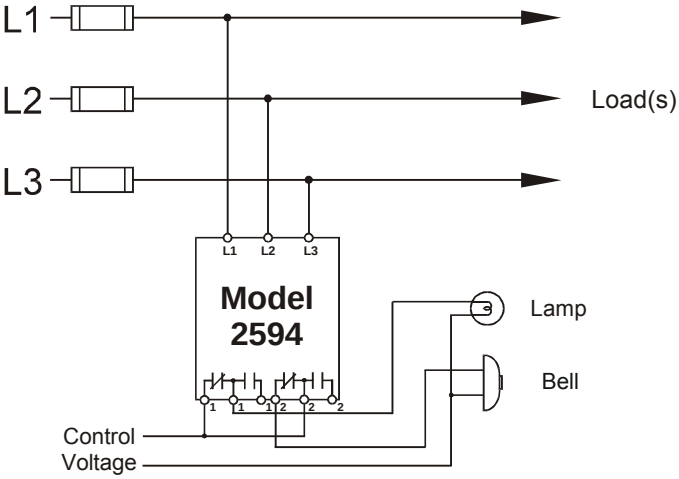
TYPICAL APPLICATION

Individual Motor Protection



TYPICAL APPLICATION

System Alarm Operation



WARRANTY

The **Model 2594 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.

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