MODEL 2638

3-Phase Monitor

with Line Voltage & Phase Sequence Indicator



- **Detects Phase Loss, Phase Reversal and Low Voltage**
- **LED Status Indicators**
- **Automatic Reset**
- **5 Year Unconditional Warranty**

DESCRIPTION

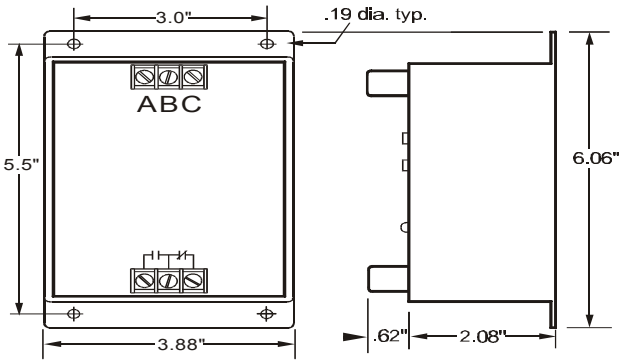
The Model 2638 3-Phase Monitor combines a 3-phase monitor with a line voltage and phase sequence indicator. Like other Time Mark monitors, the Model 2638 senses phase loss, phase reversal and low voltage.

When power and phasing are correct, the internal relay energizes. Status indicators will show that all phases are present, and the direction of phase rotation.

When a fault occurs, the monitor trips its relay and indicates which phase is lost, or, if a reversal is present. This allows you to automatically protect your equipment by correcting for the appropriate fault condition. The Model 2638 will automatically reset when correct power is restored.

One 50 Hz version and two 60 Hz versions are available from stock.

DIMENSIONS



SPECIFICATIONS

Model	B2638	C2638	EX2638
Nominal Voltage	208/240 VAC	480 VAC	380 VAC
Frequency	60 Hz		50 Hz
Adjustment Range	160-240	380-480	300-400
Power Consumption	3.7W	6.7W	6.5W
Transient Protection	2500V for 10 msec		
Repeat Accuracy	±0.1% (fixed conditions)		
Response Time	0.05 seconds		
Reset Time	0.05 seconds		
Reset Type	Automatic		
Dead Band	Approximately 2%		
Output Contacts	SPDT 10A at 240 VAC resistive		
Expected Relay Life	Mech: 10 million operations Elec: 100,000 operations at rated load		
Operating Temperature	-40° to +131° F		
Humidity Tolerance	0-97% w/o condensation		
Enclosure Material	ABS plastic		
Mounting	Surface		
Weight	6 oz.		

Telephone: Main - (918) 438-1220
Sales - (800) 862-2875
Fax: (918) 437-7584

E-mail: sales@time-mark.com
Internet: http://www.time-mark.com

TIME MARK CORPORATION

11440 East Pine Street
Tulsa, Oklahoma 74116

Doc No. 87A371 12/00

© 2000 TIME MARK CORPORATION

TIME MARK is a division of AEMT, Inc.

MODEL 2638 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 2638. ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING. THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

Installation Instructions

INSTALLATION

Mount the monitor in a suitable enclosure.

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

For motor control applications, connect the load control wiring to the normally open (NO) relay contacts.

For phase loss alarm applications, connect wiring to the normally closed (NC) relay contacts.

Apply power. If the contacts do not transfer (TRIPPED indicator ON), check that the three voltage indicators are lit and that the ABC indicator is lit.

If one or more of the voltage indicators are off, not all phases are present or of the correct voltage level.

If the CBA indicator is lit, remove power and reverse two of the three phase wires (phase rotation is reversed).

Re-apply power. If the contacts still do not transfer, rotate the TRIPPED level adjustment fully counter-clockwise. The contacts should transfer, the TRIPPED indicator should be off, the ABC indicator should be lit, and all three voltage indicators should be lit.

ADJUSTMENT

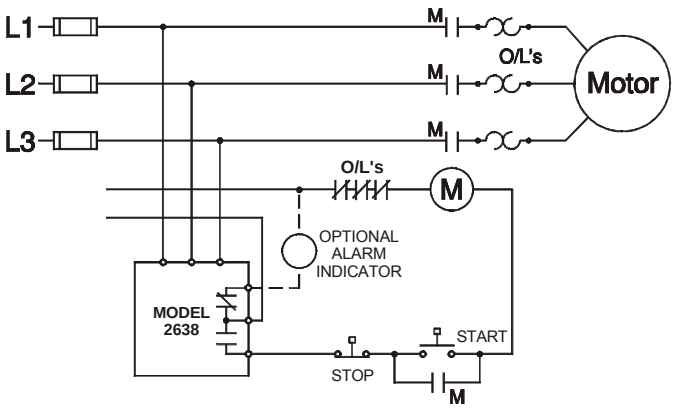
Rotate the TRIPPED level adjustment clockwise until the relay contact transfers (TRIPPED indicator ON). Slowly turn the adjustment counter-clockwise, until the contacts resets.

This adjustment method sets the trip point roughly 5-10% below the nominal voltage, and will be correct for most motor applications. Should nuisance tripping occur, turn the adjustment slightly farther counter-clockwise.

A more accurate adjustment method requires a 3-phase variac, allowing the voltage to be lowered to a specific voltage level. The 2638 can then be set to trip at this precise voltage.

If desired, the trip point can be factory pre-set for a nominal fee. Contact the factory for more information.

TYPICAL APPLICATION



Shown De-Energized

TROUBLESHOOTING

Should the monitor fail to operate properly, check that all three phases are present and of the correct voltage level. Check all fuses and verify that all wiring connections are correct. Should problems persist, contact the factory for assistance.

WARRANTY

The **Model 2638 3-Phase 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.

Telephone: Main - (918) 438-1220
Sales - (800) 862-2875
Fax: (918) 437-7584

E-mail: sales@time-mark.com
Internet: http://www.time-mark.com

TIME MARK CORPORATION

11440 East Pine Street
Tulsa, Oklahoma 74116

Doc No. 87A371 12/00

© 2000 TIME MARK CORPORATION

TIME MARK is a division of AEMT, Inc.