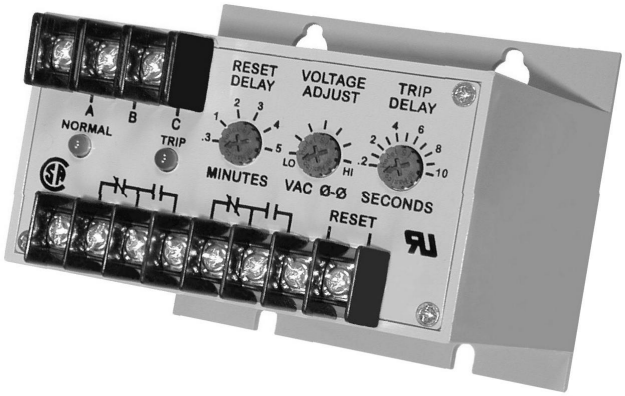
MODEL 2652

3-Phase Monitor

- **Detects Phase Loss, Low Voltage and Phase Reversal**
- **Adjustable Trip and Restart Delays**
- **Automatic or Manual Reset**
- **DPDT Output Contacts**



DESCRIPTION

The Model 2652 3-Phase Monitor is designed to protect motors, pumps, HVAC equipment, air compressors, etc., by sensing phase loss, low voltage or phase reversal.

With correct power applied, the DPDT output contacts transfer and drop out when a fault condition or loss of power occurs. An adjustable trip delay prevents nuisance tripping. The restart delay timer prevents short cycling, which is primarily used with HVAC and compressor motors.

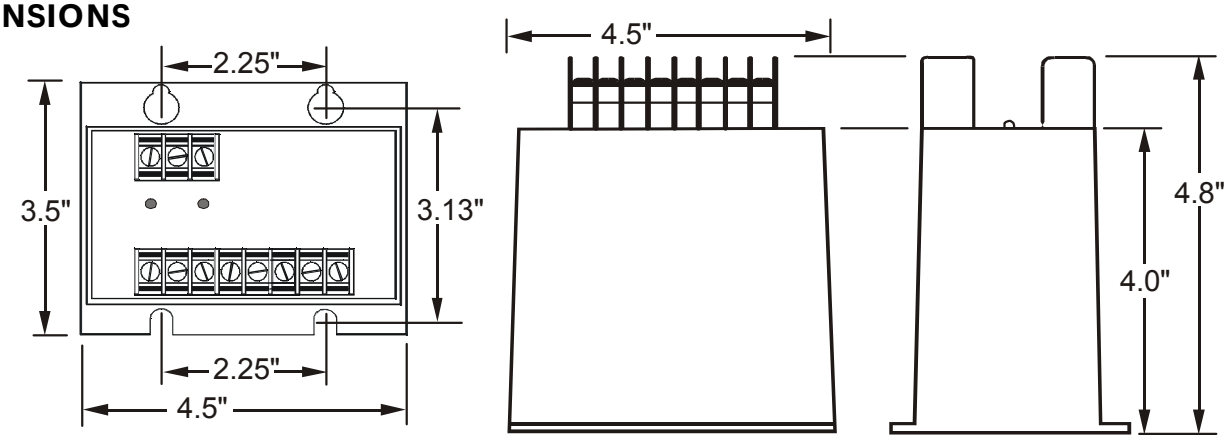
The DPDT output contacts allow the Model 2652 to be used in control circuits and alarm circuits. The automatic reset can be converted to a manual reset by adding a normally closed switch.

Five different voltage versions of the Model 2652 can be adjusted over a wide operating range. This unit is housed in an ABS plastic surface-mount case to reduce space requirements.

SPECIFICATIONS

Model	A2652	B2652	C2652	D2652	EX2652
Nominal AC Voltage (phase to phase)	120VAC	208/240 VAC	480VAC	575VAC	380VAC
Adjustment Range	85-125V	160-260V	380-500V	450-600V	300-400V
Frequency	60 Hz				50 Hz
Power Consumption (per phase)	1.5W	2W	2.5W	3W	3.5W
Repeat Accuracy	± 0.5% of set point (fixed conditions)				
Response Time	Adjustable: 0.2 to 10 seconds ± 5%				
Reset Time	Adjustable: 0.3 to 5 minutes ± 5%				
Reset Type	Selectable: Automatic or Manual				
Dead Band	Approximately 2%				
Output Contacts	DPDT 10A 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				
Enclosure Material	ABS plastic				
Mounting	Surface				
Weight	12 oz.				
Agency Approvals	UL Recognized and CSA Certified				

DIMENSIONS



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Doc No. 87A170 12/00

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MODEL 2652 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 2652. 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 power to the terminals marked **A**, **B**, and **C**.

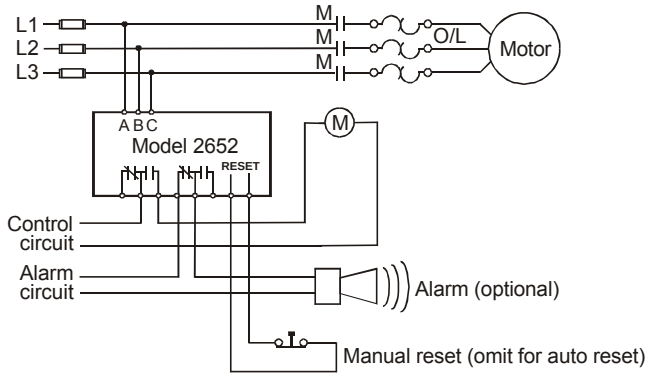
Connect the control circuit wiring to one set of the output terminals.

(Optional) Connect the second set of output terminals to an alarm circuit, or to the control circuit of a second load.

A standard wiring diagram is shown in the TYPICAL APPLICATION drawing. The contact markings are shown in the TRIPPED, or Power-OFF condition.

FOR MANUAL RESET, instead of the built-in automatic reset, install a normally-closed pushbutton switch across the terminals marked RESET. The manual reset leads should be kept as short as possible.

TYPICAL APPLICATION



Shows No Power Applied

ADJUSTMENT

NOTE: When adjusting the Model 2652, you may want to jumper the control circuit contacts, and disconnect the alarm contacts connection, to prevent the unit from cycling the load, during set-up.

Turn the VOLTAGE ADJUST, RESET DELAY, and the TRIP DELAY pots fully counter-clockwise.

Turn the VOLTAGE ADJUST clockwise, until the unit trips (NORMAL indicator OFF; TRIP indicator ON).

Slowly turn the VOLTAGE ADJUST counter-clockwise until the unit resets (TRIP indicator OFF).

Set the TRIP DELAY and RESET DELAY to the desired time settings.

This trip level adjustment will be correct for most applications.

The TRIP DELAY should help prevent nuisance tripping due to power flucuations, or motor start-ups. Should nuisance tripping still occur, increase the delay time a little, or turn the VOLTAGE ADJUST slightly farther counter-clockwise.

WARRANTY

The **Model 2652 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.

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