

# MODEL 268

## Over/Under Voltage Monitor

- Both high & low trip point adjustments
- Monitors over and under voltage
- Useful range of 90 to 140 VAC
- Automatic reset



### DESCRIPTION

The Model 268 Over & Under Voltage Monitor is designed to insure that the monitored operating voltage remains within a 120 VAC band. This device uses a dual op-amp comparator circuit to achieve stable and repeatable trip setpoints.

The output relay is energized only when the voltage being monitored remains between the upper and lower setpoints. Voltages above or below the setpoints will de-energize the relay, and illuminate the appropriate indicator LED.

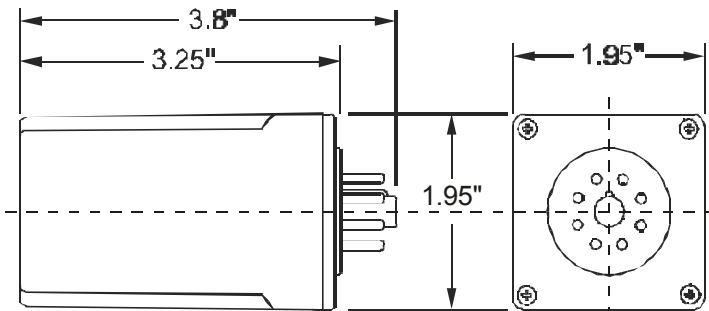
The Model 268 Over & Under Voltage Monitor is designed for continuous duty operation.

### SPECIFICATIONS

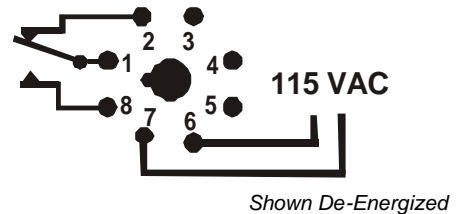
Model	268
Setpoint stability	Fixed conditions: 0.1% max Over temp range: 1.2% max
Adjustment range	Over voltage: 120 -140 VAC Under voltage: 90 -110 VAC
Response time	50 msec
Line frequency	45 - 420 Hz
Transient protection	2500V for 10 msec
Contacts	SPDT
Contact rating	10A at 240 VAC resistive
Operating temperature	- 40° to +130° F
Humidity tolerance	0-97% without condensation
Enclosure material	ABS plastic
Mounting	8-pin socket (*order separately)
Weight	4 oz.

\*order 8-pin socket number 51X120

### DIMENSIONS



### PIN DRAWING




Telephone: Main - (918) 438-1220  
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# MODEL 268

# Over/Under Voltage 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 268.  
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.  
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

## Installation Instructions

### INSTALLATION

The Model 268 Over and Under Voltage Monitor is a voltage sensing relay. The relay requires an 8-pin mounting socket, such as Time Mark's Model 51X120. The base connecting diagram on the unit shows the contacts in the 'power off' condition. The markings on the unit show the proper voltage and adjustment range of the device to be installed.

Connect the wiring to socket, as required (see the *Typical Application diagram*).

### ADJUSTMENT PROCEDURE

A variable voltage source and a digital voltmeter provide the most accurate means of calibrating the trip point setting. However, for AC line voltages, you can often obtain a satisfactory calibration by using only the AC line voltage.

Rotate the UNDER VOLTAGE adjustment pot clockwise, until the relay trips, and the UNDER VOLTAGE LED indicator is lit.

Then, rotate the adjustment pot counter-clockwise slowly, until the relay resets. The UNDER VOLTAGE LED should be off.

Rotate the OVER VOLTAGE adjustment pot counter-clockwise, until the relay trips, and the OVER VOLTAGE LED indicator is lit.

Then, rotate the adjustment pot clockwise slowly, until the relay resets. The OVER VOLTAGE LED should now be off.

These calibrations will be correct in most applications. If nuisance tripping occurs, turn the adjustments for a slightly wider voltage band.

**NOTE:** When installing the Model 268 Voltage Monitor in areas of high humidity or contamination, it is recommended that the base area and all exposed metal parts of the socket be coated liberally with a good quality silicon grease, such as Dow Corning DC-4 or DC-4X. Insert the unit into the socket and wipe off excess grease around the base. This will prevent the entrance of moisture and other contaminants into the base and socket areas.

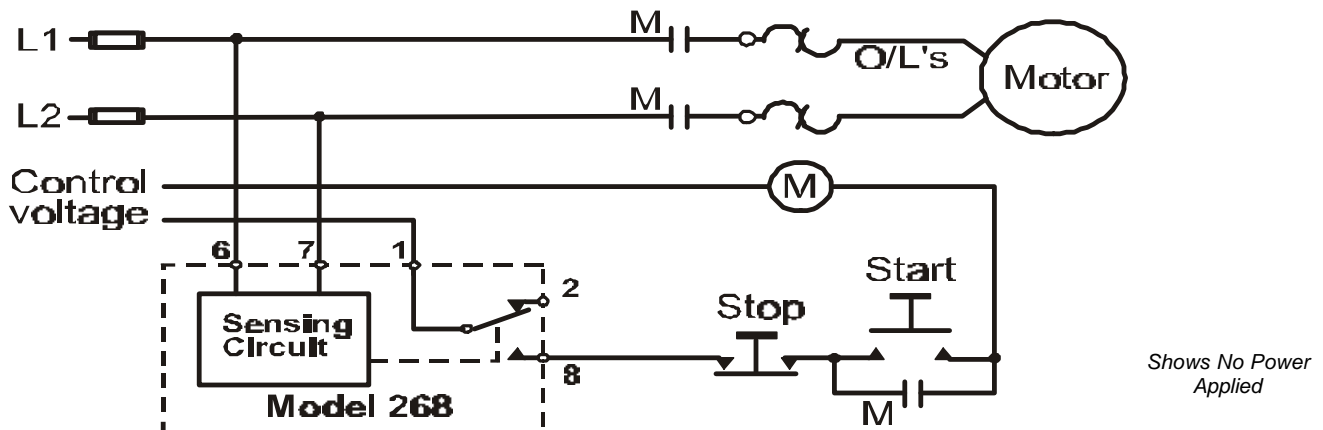
### TROUBLESHOOTING

Should the Model 268 Over and Under Voltage Monitor fail to operate properly, check all wiring connections. Verify that the correct voltage is present, and check all fuses. Should problems persist, contact your local Time Mark distributor, or the factory at 800-862-2875 (Monday-Friday; 8 a.m. to 5 p.m. CST), for further assistance.

### WARRANTY

The **Model 268 Over & Under Voltage Monitor** is warranted to be free from defects in materials and workmanship, and is covered by our exclusive **5-year Unconditional Warranty**. If this device fails to operate, for any reason, we will repair or replace it, free, for five years from the date of purchase. Contact the Time Mark Sales department, Monday through Friday; 8 a.m. to 5 p.m., CST, for further details.

### TYPICAL APPLICATION



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