## **MODEL 173**

# **AC Current Monitor**

- No CT Required for Currents Up To 25 Amps
- Quick Connect Terminals
- Detects Over or Under Current
- Surface or DIN Rail Mounting

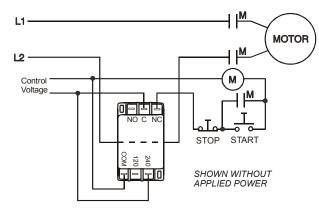
## DESCRIPTION

The Model 173 AC Current Monitor is a single setpoint AC current monitor. It can be used to detect either over current or under current, depending on whether the set point is set above or below the input current. The OVER LED illuminates and the relay energizes when the current exceeds the set point. The UNDER LED is lit and the relay is de-energized when the current is less than the set point.

Two versions, either of which can be connected to 120 or 240VAC, are available. One for current ranges up to 5 amps, the other for applications from 5 to 25 amps. For currents above 25 amps, matching CT's are available. The Model 173 is not frequency sensitive and can be used on AC currents from 50 to 400Hz.

The compact housing can be surface or DIN rail mounted with 1/4" quick connect terminals provided for input and output connections.

## TYPICAL APPLICATION Over Current Sensing



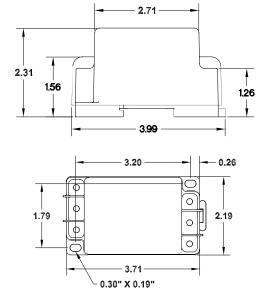
(other applications shown on page 2)



## **SPECIFICATIONS**

Model Number	173-5	173-25
Nominal Supply Voltage	120 or 240VAC	120 or 240VAC
Maximum Supply Voltage	150 or 260VAC	150 or 260VAC
Input Current	1 to 5 amps 600VAC	5 to 25 amps 600VAC
Power Consumption	240mA	
VA Burden	less than 0.5 watt	
Response Time	100ms typical	
Output Contact Rating	SPDT 10A at 240VAC resistive	
Repeat Accuracy	1% max	
Dead Band	2%	
Operating Temperature	- 20° to +140° F	
Reset	Automatic	
Terminals	1/4" quick connects	
Enclosure Material	ABS plastic	
Mounting Options	Surface Mount or DIN Rail 35mm	
Weight	3 oz.	

### DIMENSIONS





# MODEL 173 AC Current 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 173. 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 Model 173 in a safe location, observing all precautions as outlined in the GENERAL SAFETY section above.

The Model 173 has 1/4" quick connect terminals for power and output connections. The monitored line must be passed through the CT access hole located in the side of the Model 173. Polarity is not important. If an external CT is used, pass one secondary lead through the Model 173, then connect the secondary leads together.

**For over-current load shutoff**, connect the load control circuit to the normally-closed contact. This contact will open on over-current, breaking the load circuit. For an over-current alarm circuit use the normally-open contact.

**For under-current sensing**, reverse the contact connections as stated above; i.e., use the normally-open contact for load shutoff or the normally-closed contact for alarm.

### ADJUSTMENT

The **Model 173 AC Current Monitor** is screwdriver adjustable. To adjust the trip level of the current, turn SET POINT AMPS potentiometer clockwise or counter-clockwise until the desired trip setting is reached.

## TROUBLESHOOTING

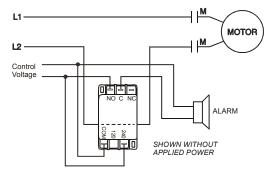
Should this monitor fail to operate properly, check that power is present and is of the correct voltage level. Check all fuses and verify that all wiring connections are correct. Should problems persist, contact your local Time Mark Distributor, or the manufacturer at **800-862-2875**.

## WARRANTY

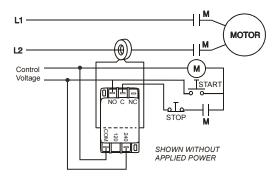
This product is warranted to be free from defects in materials and workmanship for one year. Should this device fail to operate, we will repair it for one year from the date of manufacture. For complete warranty details, see the *Terms and Conditions of Sales* page in the front section of the Time Mark catalog or contact Time Mark at 1-800-862-2875.

## **ADDITIONAL APPLICATIONS**

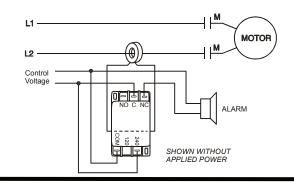
- Over Current Alarm



- Under Current with External CT



- Under Current Alarm with External CT





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