

MODEL 274

3-Phase Current Monitor

- Monitors 3 Simultaneous Currents
- 1 to 5 Amps per Leg
- Adjustable Trip for Highest Current

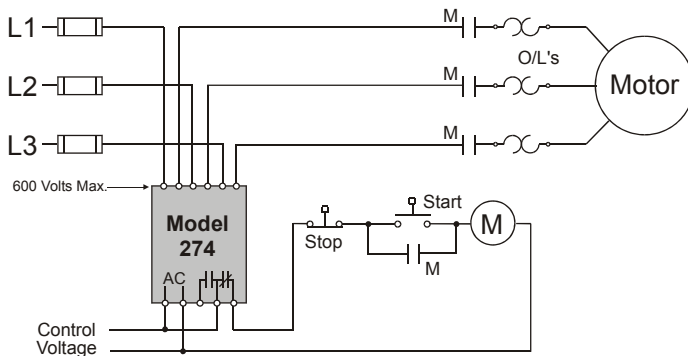
DESCRIPTION

The Model 274 3-Phase Current Monitor is designed to monitor all legs of a 3-phase line, and can also be used to monitor three individual single phase lines.

The output relay will energize on an over-current condition on any one of the 3 monitored lines. Two indicator lamps are provided to show when an over-current condition exists and when the output relay is tripped. An adjustable trip delay of 0.2 to 20 seconds is provided to reduce nuisance tripping. Matching current transformers are available to extend the range of the device upward to 1,000 amps.

The Model 274 is offered in either manual or automatic reset models. An external power supply of 24, 120, or 240VAC powers the device.

TYPICAL APPLICATION - 1 to 5 Amps



Shows No Power Applied



SPECIFICATIONS

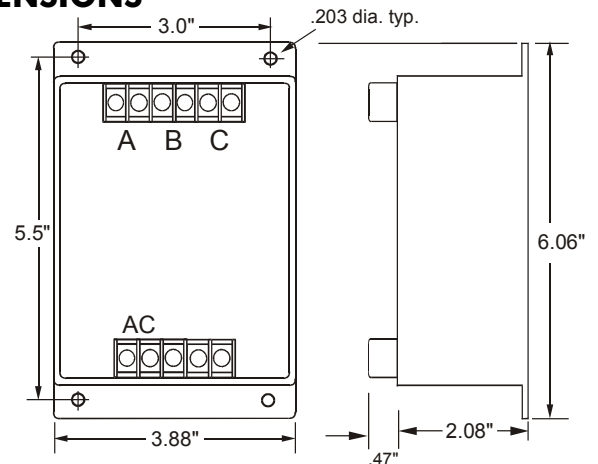
Model	274-5-24	274-5-120	274-5-240
Input Voltage	24VAC	120VAC	240VAC
Input Voltage Range	20 - 28V	100 - 130V	190 - 250V
Current Range	1 to 5 amps		
Power Consumption	3W max.		
Frequency Range	50 to 400Hz		
Dead Band	4% max.		
Trip Delay	0.2 to 20 seconds		
Reset	Automatic or Manual		
Contact Rating	SPDT 10A at 240VAC resistive		
Expected Relay Life	Mech: 10 million operations Elec: 100,000 ops at rated load		
Operating Temperature	- 20° to +131° F		
Enclosure Material	ABS plastic		
Weight	1 lb. 4.5 oz.		

ORDERING OPTIONS

MODEL	VOLTS	RESET
274-5	24VAC	Auto
	120VAC	Manual
	240VAC	

EXAMPLE: 274-5-120-A orders a Model 274, 1-5 amps 120VAC automatic reset current monitor.

DIMENSIONS



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



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MODEL 274 3-Phase 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 274.
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

Installation Instructions

INSTALLATION

NOTE: Be sure that all electrical circuits are turned off before connecting to the Model 274.

Mount the Model 274 3-Phase Current Monitor in a suitable enclosure.

If the current to be monitored is 5 amps or less: Break and connect each wire to the three inputs of the Model 274 (see TYPICAL APPLICATION - 1 to 5 Amps). **Observe polarity. Limit voltage to 600V maximum.**

If the current to be monitored is greater than 5 amps: Install a current transformer (CT) on the line. Connect the secondary leads of the CT to the Model 274 terminals (see TYPICAL APPLICATION - Over 5 Amps). **Observe polarity.**

Connect the operating supply voltage to the AC input terminals.

Connect the load control wiring to the appropriate terminals. **For most motor control applications,** use the normally-closed contact(s), which will open when the current is above the desired trip level. **For alarm applications,** use the normally-open contact(s).

Turn on the supply voltage. The contacts should not transfer, and neither of the indicator lights should be lit.

ADJUSTMENT

Set the DELAY ADJUST to the required amount of delay.

If the desired current trip level is known, set the CURRENT ADJUST to that point. A slight adjustment up or down may be necessary to allow for tolerance inaccuracies.

Usually a trip is desired only if the current changes from the present nominal. To calibrate for this (*On Manual Reset versions, press and hold the reset button during this step*), turn the DELAY ADJUST to maximum. Turn the CURRENT ADJUST up (or down) until the OVER CURRENT indicator lights. Turn the adjustment back until the light just goes out. Reset the time delay to the previous setting.

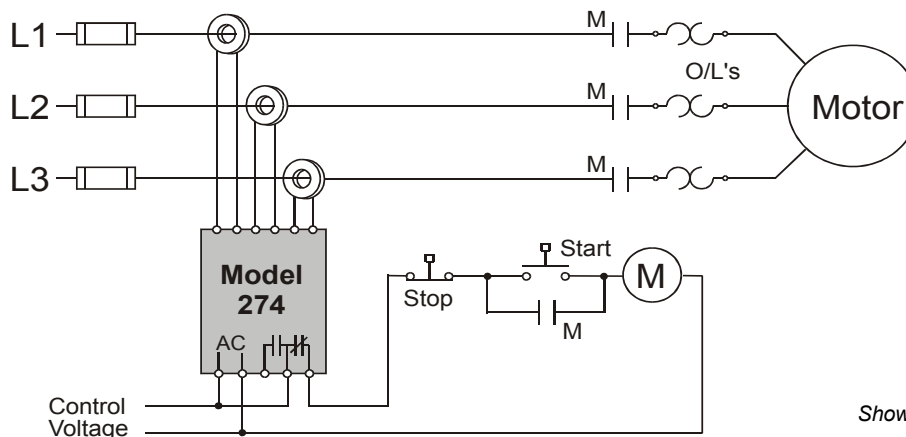
TROUBLESHOOTING

Should the Model 274 3-Phase Current Monitor fail to operate, check all connections. Verify that all three voltages are present, and check all fuses. Should problems persist, contact the factory at 800-862-2875, for assistance.

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.

TYPICAL APPLICATION - Over 5 Amps



Shown With No Power Applied

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