

# MODEL 15

## Reverse Phase Correction Relay

- Senses and automatically corrects for damaging phase reversal
- Low power consumption
- Unconditional 5-Year Warranty

### DESCRIPTION

Under normal power conditions, incoming A B C voltage is passed straight through the device to the A B C output terminals (4 amps @ 480 VAC resistive maximum). If the unit detects an incoming reverse phase condition (C B A), it will light the reverse phase LED and internally switch 2 of the phases and pass the corrected phasing out to output terminals A B C.

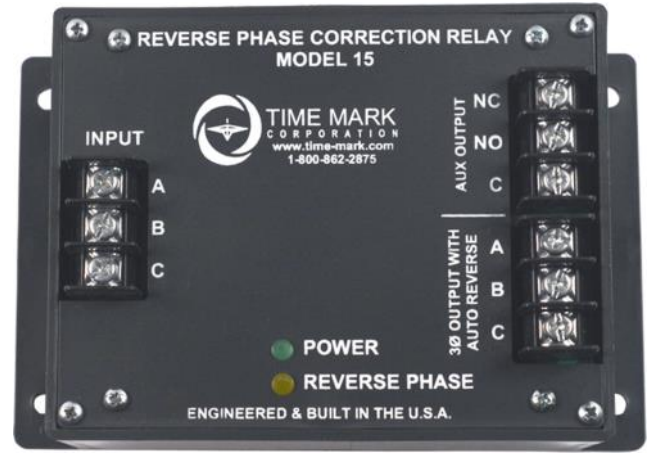
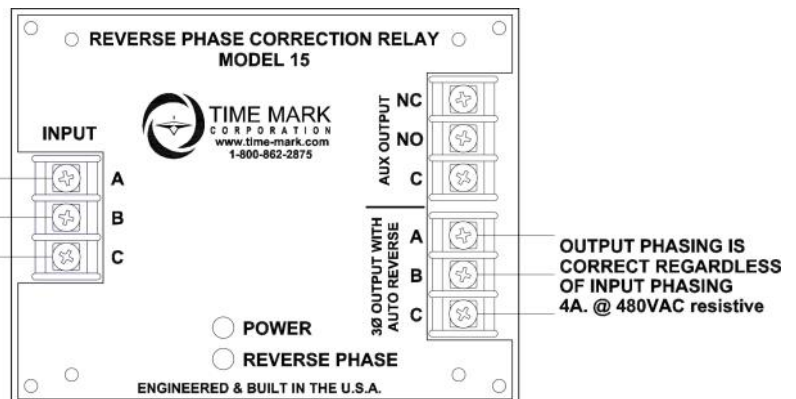
If your load is higher than 4 amps @ 480VAC resistive, the Model 15 provides an auxiliary output relay to put in the control circuit of a remote reversing contactor. If phasing is correct, the relay will remain in the static condition (N.C contact will remain closed and N.O. will remain open). If the Model 15 detects a reverse phase input, the auxiliary output relay will energize and the relay contacts will switch (N.C contact will open and N.O. will close). Reversing the phases is done through the wiring of the reversing contactor.

### INSTALLATION

1. Mount the Model 15 in the desired location.
2. Connect the 3 - phase power to the input terminals marked A, B and C.
3. When using a reversing contactor, connect the control circuit to the Aux Output terminals and then to the reversing contactor.

*(Refer to the Typical Motor Application wiring diagram for additional information).*

STD	REV
A	C A B
B	B C A
C	A B C



### SPECIFICATIONS

Model	15-240	15-480
Nominal voltage (phase to phase)	240VAC	480VAC
Operating range	± 10%	
Frequency	50 to 60Hz	
Power consumption	2W per phase	
Transient protection	2500V for 10ms	
Repeat accuracy	± 0.1% (fixed conditions)	
Response time	.05 seconds	
Reset time	.05 seconds	
Reset type	Automatic	
Dead Band	Approximately 2%	
Output contacts (AUX)	SPDT 10A at 240VAC resistive	
Output contacts (3 Phase)	3P3T 4A at 480VAC resistive	
Expected relay life	Mechanical: 10 million operations Electrical: 100,000 at rated load	
Operating temperature	- 20° to +140° F	
Humidity tolerance	0 - 97% w/o condensation	
Case material	NORYL	
Mounting	Surface Mount	
Weight	15.9 oz.	

Telephone: Main - (918) 438-1220  
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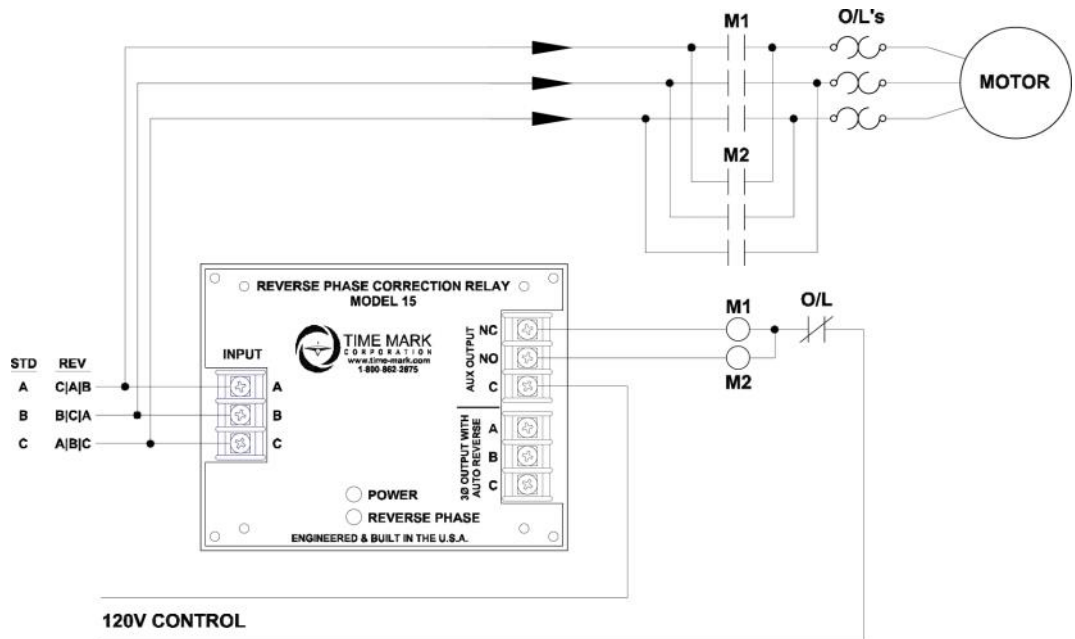
READ ALL INSTRUCTIONS BEFORE INSTALLING, OPERATING OR SERVICING THIS DEVICE.  
KEEP THIS DATA SHEET FOR FUTURE REFERENCE.

## GENERAL SAFETY

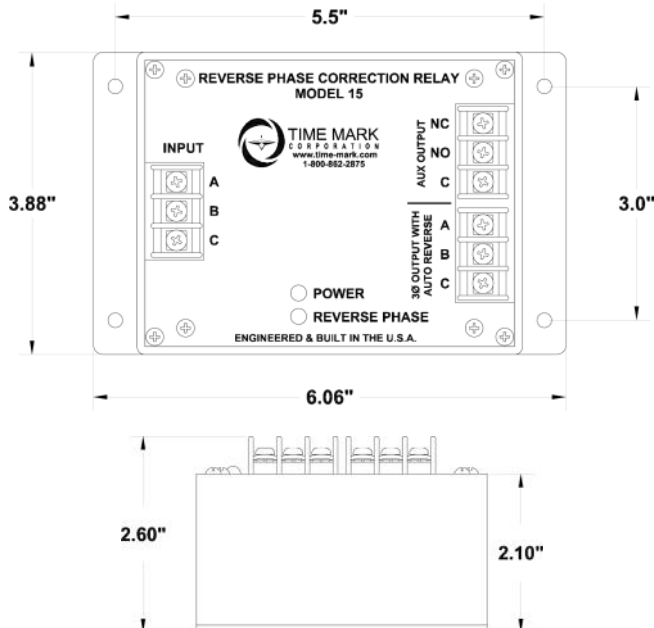
POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE MODEL 15.  
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.  
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

## Installation Instructions

### TYPICAL MOTOR APPLICATIONS



### DIMENSIONS



### TROUBLESHOOTING

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

### WARRANTY

This product is warranted to be free from defects in materials and workmanship, and is covered by our exclusive **5-year Unconditional Warranty**. Should this device fail to operate for any reason, we will repair it for five years 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.

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