

Phase Rotation Tester

SPECIFICATIONS

SUPPLY VOLTAGE	20 to 600 VAC, 50/60/400 Hz	
SENSOR VOLTAGE	12 VDC	
ABSOLUTE MAXIMUM VOLTAGE	700 VAC, Phase-to-Phase	
BATTERY	9V, Included	
ISOLATION	3000 VAC, Leads to User	
ROTATION/ SEQUENCE	Red	Phase Loss/No Voltage
	Yellow	Low Battery
OPERATOR CONTROL	Momentary Test Button	
INDICATORS	Green	Normal Rotation/Sequence
	Red	Reverse
TEMPERATURE	Operate	32° to 113°F (0° to +45°C)
	Storage	-40° to 140°F (–40° to +60°C)
RESPONSE TIMES	100ms	
LEADS	18", color coded, battery clip type	
DIMENSIONS	3.75 x 2.625 x 1.5 inches	
WEIGHT	NET: 4.16 oz	

The **PRT-100** is a hand-held tester that takes the guesswork out of connecting a 3-phase motor. The direction of rotation of a motor depends on **phase sequence** of the power line connections. If the sequence is reversed, the motor will run in the wrong direction, possibly damaging the equipment connected to the motor. The **PRT-100** identifies the leads of a three-phase motor and detects the sequence of a three-phase power line. Once the motor and line leads are properly identified, the motor can be wired so that it turns in the desired direction on the first try. The unit also detects phase loss and no voltage conditions.

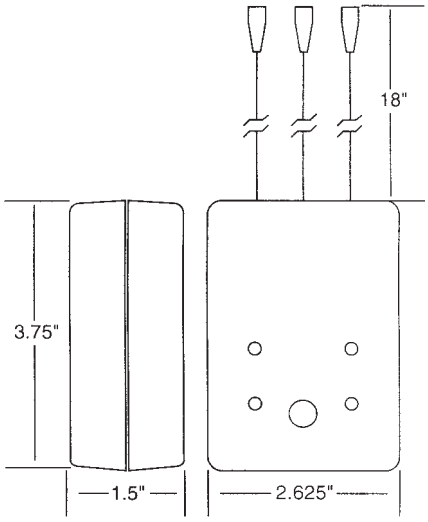
OPERATION

To identify the leads of a three-phase line, connect the tester to the energized line and press the test button. Either the normal or reverse LED will glow. If the reverse LED glows, switch two leads and press the test button again. The normal LED should now glow. Label the three-phase line conductors according to the marking on the tester. If the loss LED glows, a phase loss or no voltage condition exists, and the normal and reverse LEDs are meaningless. Correct the loss condition and retest.

To identify the leads of a three-phase motor, connect the tester to the de-energized motor, turn the rotor in the desired direction, and press the test button. If the reverse LED glows, switch two leads and repeat. The normal LED should now glow. Label the motor leads according to the markings on the tester. NOTE: the loss LED will glow during motor testing. This is normal since the turning motor generates less than 20 volts.

De-energize the three-phase line and connect the line conductors to the matching motor leads. When the motor is energized, it will run in the desired direction.

DIMENSIONS (INCHES)



ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
PRT-100	Phase Rotation Test