



Motor & Line Rotation Tester

MRT

Specifications

Electrical

Line Voltage:

20mVAC to 600VAC, 3Ø

Frequency: Manual Turning* to 400Hz

Phase Rotation:

L1, L2, L3 which is A, B, C,
Respectively

Rotation Indicator:

Green LED: Correct Rotation

Battery Indicator:

Green LED: Battery OK

Battery Type:

9 Volt DC Alkaline Battery, Included

Physical

Termination:

Alligator clips w/color coded boots

Cable Length: 9" leads

Packaging: Nema 1 enclosure

Weight: 6.5 oz. w/batt. & w/o magnet
9.0 oz. w/battery & magnet

Magnet Pull Strength: 30 lbs.

Ambient Temperatures

Operating: 0°C to 50°C

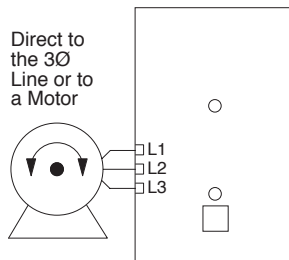
Storage: -30°C to 85°C

***Note:** Some motors may require turning faster than others due to the permeability of the motor, which is related to the ability to generate a sine wave signal large enough to test.



- Tests for Motor Rotation (Off Line)
- Tests for Phase Sequence (On Line)
- Tests Presence of All Phases
- No Fuses
- Tests 20mVAC to 600VAC, 3Ø
- Recessed Push Button
- LED Indicators
- Clip Leads for Easy Hook-Up

Connections



Ordering Information

MRT - M

R-K Model

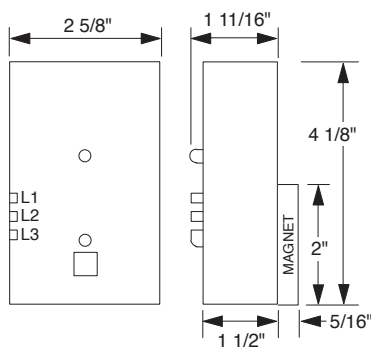
Magnet Options

___ - No Magnet

M - Magnet Option Installed

The magnet option allows you to temporarily connect the MRT to your motor, freeing your hands so you can hook up the clip leads without holding on to the MRT. After hook-up is completed, you can then verify rotation with the push of a button. **Warning: Do not place MRT-M near magnetic media (diskettes, etc.).**

Dimensions



Operation

Warning: Always remove power when connecting and disconnecting the MRT clip leads!

The MRT is designed to determine which combination of motor leads will provide the desired motor rotation when matched with the three phase electrical system under test. The Correct Rotation LED indicates the phase sequence to obtain the desired motor rotation. Remove power from the circuit to be tested and connect the three MRT leads (L1, L2, and L3) to the terminals to be tested.

For Line Rotation Testing: After the MRT has been connect to the line with power off, re-apply power while depressing the "Rotation Test" push button on the MRT. If the green Correct Rotation LED lights, the three phase rotation sequence matches the MRT sequence. If the LED does not light, remove power and reconnect the MRT by switching two leads. The green Correct Rotation LED should light. Remove power and rewire the control to match the rotation determined by the MRT. If the LED still does not light, one or more phases is missing. Check your fuses and wiring.

For Motor Rotation Testing: Connect the MRT leads to the motor leads. Rotate the motor by hand while depressing the "Rotation Test" push button on the MRT. If the green Correct Rotation LED lights, then connecting the motor leads to the matching three phase voltage leads will provide the desired rotation. If it does not light, switch two leads and try again.