The MARTINDALE ELECTRIC Company

INSULATION TESTER MODEL MODEL 2109 (115VAC) & MODEL 2129 (230VAC)

Model 2109 and 2129 are non-destructive Insulation Testers. When a breakdown in insulation occurs, the Tester will automatically shut off, and have to be manually reset. To reset the Tester simply push the Reset Button.

CONNECT TO PROPER VOLTAGE SOURCE BEFORE OPERATING.

These high voltage, transformer type Insulation Testers are easy to use, for quick, positive determination of grounds, shorts, and broken wires in motors, transformers, and other low voltage equipment.

TEST

General:

1. Connect Power Cord to grounded electrical outlet per voltage specified on name tag (Front Label).
2. Set dial pointer (Selector Knob) to desired test voltage. Place Power Switch to ON. Buzzer will sound. Press START/RESET Button. Buzzer will shut off. Pilot Light will light indicating high voltage on the Test Prods and unit ready for testing.
3. Hold Prod Handles at the knurled portion and slide Buttons forward with thumbs until contact Test Points are exposed.
4. Apply Test Points to work being tested. If voltage breakdown occurs, Buzzer will buzz, Pilot Light will turn off and Test Points will be de-energized. The START/RESET Button must be pressed to resume testing.

CAUTION: Turn Power Switch OFF before changing test voltage.

To test insulation between conductor and ground:

Apply one Point to a clean portion of the frame so good contact is made and the other Point to one end of each coil in the apparatus. If insulation withstands the test of voltage successfully, the indicating Lamp is not affected. However, when a breakdown of the insulation occurs, the Pilot Light on the Tester will dim or go off, the Buzzer will sound, and the voltage to the Prods will shut off. The Tester must then be reset by manually pushing in the Reset Button.

To test insulation between coils:

Touch one Point to the cleaned end of one coil and then touch the other Point to on cleaned end of each of the other coils. Be sure that this test is made between each pair of coils.

On complete products (motors, lamps, appliances, etc.), which contain a power cord, the test is normally made from each of the prongs on the cord set plug to any exposed metal parts. Switch on unit under test in the ON position.
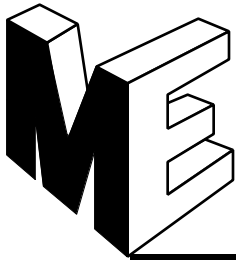
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MAINTENANCE and STORAGE:

When not in use, store unit within a plastic bag.

Unit must undergo yearly Calibration.

WARRANTY:

This tester is warranteed to the original owner against defects in materials and workmanship for ninety (90) days from date of purchase. Any part found to be defective (except by overloading, misuse, neglect, fire, accident, tampering with by unauthorized serviceman, or other cause beyond the manufacturer's control), will be replaced or repaired free of charge.

SPECIFICATIONS:

Primary Power: 50/60Hz, 1 phase, 115VAC (2109), 230VAC (2129)

Test to 2500VAC in seven (7) steps: 500, 1080, 1250, 1500, 1750, 2000, & 2500.

>   Range 500 - 2500VAC (NEMA recommendation for insulation test is twice normal voltage plus 1000 volts) ±5% accuracy. Calibration is traceable to the National Institute of Standards and Technology.

Construction (packaging): metal, corrosion protected.

Transformer: completely sealed to reduce the possiblity of shorting to the case. High capacity (500va), capable of testing motors 200HP and above.

Test Prods & Leads: self-retracting Test Points. They retract into fiber sleeves under spring tension to minimize chance of accidental contact with the Points.

>   Six (6)-foot long Leads are high voltage insulated.

Alarm Circuit (breakdown): when breakdown in the work piece occurs, the Pilot Light will go out and the Buzzer will sound and the test voltage to the Prods will shut down. Tester must be manually reset in order to resume testing.

Spare Parts: to be recommended on request.

Enclosures: Operating Instructions.