

OPERATING INSTRUCTIONS FOR PHASING VOLTMETER

Model 0-15kV Phasing Voltmeter

Model 0-20kV Phasing Voltmeter

Model 0-25kV Phasing Voltmeter

Model 0-35kV Phasing Voltmeter

Model 0-40kV Phasing Voltmeter

I. Selector Switch Position

C	Capacitance Tap Sensing
CP	Capacitance Tap Phasing
L	Line Sensing
LP	Line Phasing
BT	Battery Test

II. Proof Testing (ALWAYS TEST PRIOR TO USE)

- A. ALL Selector Switch Positions MUST be proof tested before making any live measurements!
- B. Make sure tester is properly connected to battery and turn switch to the “on” position.
- C. With meter probe, make contact with raised washer on tester.
- D. Depress washer until red indicator glows.
 1. If indicator does not come on or no meter deflection is obtained, do not attempt to use the meter!
- E. Look for meter deflection on “C” mode to move at least three-quarter scale.
- F. Look for meter deflection on “L” mode to move one-half scale.
 1. If little or no deflection is observed, check selector switch on opposite side of the meter to verify unit is in “C” or “L” function.
 - a. If not, turn switch to proper function and repeat test
 - b. **If there still is no deflection do not attempt to use unit.**
- G. To verify proper operation on phasing modes, turn selector switch (located opposite side of meter face) to appropriate position – “CP” or “LP”.
- H. Install phasing cable between meter probe and phasing probe.
 1. Make contact with stationary washer of tester using phasing probe tip.
 2. Depress raised washer with meter probe until red indicator glows.
 - a. Observe the same precautions as above for red indicator.
 3. Look for meter deflection “CP to be greater than full scale and a deflection on “LP” to be between 3 and 6kV.
 4. Depress raised washer with meter probe until red indicator glows.
 - a. Make contact on same washer with both probe tips.
 - b. Look for zero deflection on the meter.
- I. ***Always use proper safety equipment and follow your company’s procedures when making live measurements!***

NOTE: POSITIVE DEFLECTION ON THE METER DURING PROOF TETER OPERATION DOES NOT PROVE ACCURACY OF CALIBRATION. THE VOLTMETER SHOULD BE SCHEDULED FOR ANNUAL CALIBRATION CHECKS AND INSPECTIONS FOR SAFETY AND RELIABILITY.

Testing Procedure Live Line

Note: Always follow your company’s safety and testing procedures.

OPERATING INSTRUCTIONS FOR PHASING VOLTMETER

- Model 0-25kV Phasing Voltmeter**
- Model 0-15kV Phasing Voltmeter**
- Model 0-20kV Phasing voltmeter**
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IV. Maintenance

- A. Selector switch should indicate better than ¾ scale deflection when in BT position.
- B. If the indication is less than ¾ deflection, batteries should be changed.
- C. Storage: Store in a cool dry place. Never store unit in damp or wet place, as condensation will decrease personal safety.
- D. Operation Check: Always verify unit is functioning with proof-tester before and after each use. *(Follow operating instructions for tester.)*

General Maintenance/Troubleshooting Guide

PROBLEM	POSSIBLE SOLUTION
Red indication light on tester dim or not on.	Replace 6-volt lantern battery
Meter deflection is low or does not move when red light on tester lights.	<ul style="list-style-type: none"> a. Check 6-volt lantern battery for low volts when loaded. b. Check battery tester on back of meter. c. Check switch position.
Meter deflection is low or does not move on "BT" switch position.	Replace 6-volt lithium battery on PC board inside large meter head.

GRAY TEST BOX – NOTE:

- ❖ The Gray Test Box produces different voltages. The voltage varies from box to box and battery to battery (battery age plays a part also).
- ❖ Cap or C will vary – ¾ scale to full scale.
- ❖ L or Line will read from 3kV to 15kV.
- ❖ The Gray Box is to make sure the unit is working before use.
- ❖ C and L mode are approximate because the test boxes vary in the voltage they produce.