Bierer METERS
Safety is number one.

Operating Instructions

AV300
PROX. – to – 300kV
Direct Contact
Audible-Visual

MADE IN USA

⚠CAUTION

The equipment covered in these operating instructions should be used by qualified employees, trained in and familiar with the safety-related work practices, safety rules and other safety requirements associated with the use of this type of equipment. These instructions are not intended as a substitute for adequate training, nor do they cover all details or situations which could be encountered in relation to the operation of this type of equipment.

⚠WARNING

Use appropriate length live line tool for the voltages being worked and maintain minimum approach distances as outlined in OSHA 1910.269, Table R-6. Do not let live line tool fittings become grounded in any way. This will damage meter and may cause personal injury.

NOTICE

Before operating this equipment, read, understand and follow all instructions contained in this manual. Keep instructions with equipment.

⚠WARNING

Unit shall be tested before and after each use on a known voltage source. Failure to do so could result in false negative indications.

Design and Function

The AV300 is a direct contact voltage indicator with an audible and visual alarm to indicate the presence of voltage, with an operating range from Proximity voltage detection to 300kV transmission voltage. Activation thresholds are greater than 50% of voltage rating on selector switch, dependent on proximity to energized or grounded objects.

Example: 70kV position activation threshold is +20kV p-to-g.

A 12 position switch is used to select various functions and voltage levels as follows:

Position	Description
Off	Unit Off for Storage and Transit
PROX	Proximity Voltage Detection
240V	Direct Contact on 240V system
2.5	Direct Contact on 2.5kV system
7.5	Direct Contact on7.5kV system
15	Direct Contact on 15kV system
30	Direct Contact on 30kV system
40	Direct Contact on 40kV system
70	Direct Contact on 70kV system
140	Direct Contact on 140kV system
300	Direct Contact on 300kV system
Test	Test basic meter function by sounding horn and lights

Note: In the test position the voltage indicator should give a loud audible alarm and bright visual indication. If not, replace the 9 volt battery behind the live line tool attachment threaded into the meter housing.

Voltage Indication in the "Prox" Position

Designed for use as a hand held non-contact voltage indicator for single phase overhead lines, it may also be used as a Proximity voltage detector.

1. Turn selector switch to the **Test** position to test voltage indicator for proper operation. See Note, page 2.
2. Turn the selector switch to the **Prox** position.
3. Holding unit in bare hand, point towards the overhead conductor. Audible-visual alarm indicates presence of voltage.

Caution: In the **Prox** position the audible-visual alarm only indicates the presence of voltage but does not indicate the actual voltage present. To confirm the presence of nominal or induced voltage prior to installing grounds, re-test the line or equipment utilizing an all-purpose utility meter such as a PD25 or PD50.

If there is any doubt about the voltage indicator alarms in the **Prox** position, the line or equipment shall be considered energized and appropriate safety precautions taken, i.e. confirm visual open gaps, tag outs, hold orders and sources of induced voltage.

Direct Contact Voltage Indication all Positions

1. Turn selector switch to **Test** position to test voltage indicator for proper operation, See Note, page 2.
2. Attach voltage indicator to appropriate length live line tool for voltage being tested.
3. Turn selector switch to appropriate voltage range.
4. For Overhead application use the hook probe and make direct contact with the conductor. Audible-visual alarm indicates presence of voltage within the activation threshold and voltage range selected, See Chart, page 2.
5. For Underground application use the bushing adapter and plug unit into bushing insert on the transformer. Audible-visual alarm indicates presence of voltage within the activation threshold and voltage range selected, See Chart, page 2.
6. For Secondary application use the low voltage probe adapter and make direct contact to conductor. Audible-visual alarm indicates presence of voltage within the activation threshold and voltage range selected, See Chart, page 2.
7. No audible-visual alarm indicates the voltage is below the threshold values for the selected position, See Chart, page 2.
8. Turn the selector switch to the **Test** position to re-test the voltage indicator.

⚠WARNING

Unit shall be tested before and after each use on a known voltage source. Failure to do so could result in false negative indications.

Testing Meter on Known Voltage

1. Turn selector switch to **Test** position to test voltage indicator for proper operation, See Note, page 2.
2. Attach voltage indicator to appropriate length live line tool for voltage being tested.
3. Turn selector switch to the 2.5kV voltage position.
4. Place the 3kV power supply on a flat, sturdy surface.
5. Turn the power to the supply on.
6. With the probe tip, make contact with the plunger switch side of the power supply and apply pressure to the switch.
7. If the meter is functioning correctly, you will get a positive voltage indication from the meter. If you do not get a positive voltage indication, check battery power on the tester and the meter and try again, if no indication is acquired, do not use the meter and contact technical support.
8. After testing is complete. Turn off the power supply and return it to its storage case and the meter is now tested and ready for normal use.

Alarms and results will vary due to field condition including, but not limited to, conductor proximity, size and orientation of system components in the area, both energized and grounded. As with all voltage detector devices, a false positive can occur when both voltage indicator electrodes (probe tip and live line tool attachment) are at the same potential. The AV300 should be used as a secondary means to confirm the status of a circuit after standard operating procedures such as visual open gaps, hold orders and tag outs render the circuit de-energized. If there is any doubt about the audible-visual alarm under any circumstances, the line or equipment shall be considered energized and proper safety precautions shall be taken.

NOTES

PARTS & ACCESSORIES

PART NO.	DESCRIPTION
3402	Quick Change to Grip All Adapter
3403	Quick Change to Universal Adapter
8128EALB	15 – 25kV Elbow Adapter
8128TBALB	15 - 25kV Bushing Adapter
10022CHL	2’ Standard Handle
10022HHSL	2’ Extension Handle
CBL	Large Canvas Bag
PA165UGA	Plastic Universal Grip-all
PD50B	26" Storage Box with Foam
81280LHM	Hook Adapter
81280LPM	Straight Probe Adapter
81280B1	6V Battery for Power Supply
PA25B	20” Storage Box with Foam
PA25T	3kV Power Supply
PAH6TB	26" Storage Box for Handles

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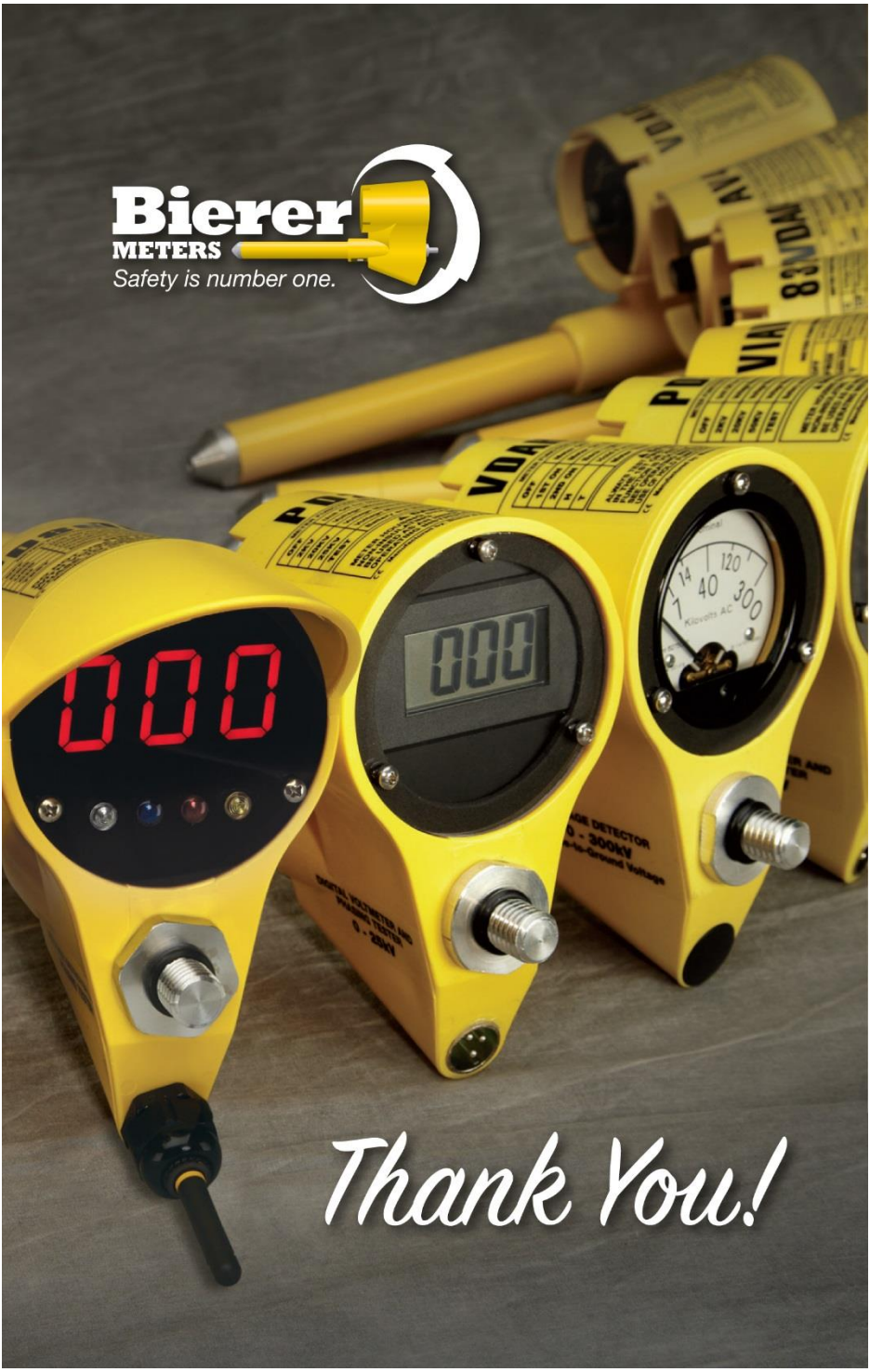
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Thank You!