

# VABO-80 SERIES 80 kV CIRCUIT-BREAKER VACUUM BOTTLE TESTER







VABO-80 is designed using advanced engineering technology to test circuit-breaker vacuum bottles up to 80 kV DC. It has fast, easy and accurate measurement features through its user-friendly software. VABO-80 is a battery-powered device (optional feature) that allows users to perform tests even without a power supply during on-field tests.

Users can select the test voltages from 10kV to 80kV DC with step voltages of 1kV, and the user can define the test time from 5 seconds to 2 minutes. The leakage current preset values of VABO-80 are 100  $\mu\text{A}$ , 200  $\mu\text{A}$  and 300  $\mu\text{A}$ . The test can be performed after setting the output voltage and test time with a predefined cutoff for leakage current. After the execution of the test, if the leakage current doesn't exceed the preset leakage current value, the screen will show "TEST PASSED". If the leakage current exceeds the preset value, then the voltage will be immediately turned off and shows "TEST FAILED" on the screen. In the case of HV presence, the HV indicator on the device illuminates with an audible tone.

Additionally, VABO-80 can test the integrity of electrical safety gloves by selecting the class of standard. This test evaluates the gloves' resistance to current leakage. It measures the amount of current that passes through the gloves when they are subjected to a specified voltage. The leakage current should not exceed a certain threshold to ensure the gloves provide adequate insulation.

VABO-80 features a 4.3-inch fairly large TFT colour touch display, which is visible under both bright sunlight and dim light conditions. With the HighTest Data Management Platform (DMP Software), users can analyse and manage measurement results on PCs. Operators can easily print the measurement results with the 2.25-inch built-in printer of VABO-80. The results can also save to a USB flash drive or the device's internal memory. Multilanguage capability and user-friendly operation menu make it easy to control VABO-80. VABO-80 is a lightweight, compact and rugged device with the protection of IP67 (case closed), which makes it perfect for field tests.

# WHY WE NEED TO TEST A VACUUM BOTTLE INTERRUPTER?

Fast and reliable protection is the most important in case of any faults occurring in the electrical power system. Suppose the circuit breaker does not succeed in clearing the fault at the appropriate moment. The resulting accident can be dangerous in terms of both personnel injury and equipment damage and cause heavy losses. Even though circuit breakers can be very reliable, they tend to gather dirt, moisture, and contaminants on the poles and on the exterior surface of the interrupter, which may cause insecurity during operation. Once the air finds its way into the interrupter and leakage starts to appear, the vacuum bottle becomes unreliable. For the mentioned above reasons and more, Vacuum bottle interrupters must be tested and maintained to ensure proper operation.



# **DEVICE HIGHLIGHTS**



#### Vacuum Bottle Integrity & Safety Gloves Testing

VABO-80 Series can apply up to 80 kV to test the leakage current of Vacuum bottle interrupters and electrical safety gloves.



#### Optional Rechargeable Li-Ion Smart Battery

VABO-80 comes with a 14.4V Li-Ion smart battery option which enables you to make tests while on field. It works on both main power and consuming battery power.



## 4.3-inch TFT Colour Touch Screen

VABO-80 is built-in with a 4.3-inch TFT Colour Touch Screen which is visible under both bright sunlight and dim lit environment.



## 2.25-inch Built-in Thermal printer

VABO-80's built-in thermal printer let you print the results immediately during field test.

# **FEATURES**

- Circuit Breaker Vacuum Bottle Interrupter Testing
- Electrical Safety Gloves Integrity Test
- **Automatic Testing**
- 10 kV to 80 kV DC with 1 kV step voltages
- High Accuracy (1.5 %)
- 100 μA, 200 μA and 300 μA leakage current preset value
- Battery (Option)
- 2.25-inch Built-in Printer
- Internal memory (storage up to 200 records)
- External Memory- USB flash drive
- PC Software
- 4.3-inch TFT touch colour Display
- Light-Weight



TECHNICAL SPECIFICATIONS	
Measurement/Test	Circuit Breaker Vacuum Bottle Interrupter Testing, Electrical Safety Gloves Integrity Test
Output Voltage	10 kV to 80 kV DC with 1 kV step voltages
Output Ripple Voltage	2% at 20 kV - 80 kV ; 3% at 10 kV
Discharge Time	< 3 seconds
Leakage Current Preset Value	100 μA, 200 μA and 300 μA
Accuracy	Typical: 1.5 %
Input Power	100-240 Vac, 47/63 Hz
Built-in Battery	Yes, 14.4 V 3.45 Ah (Optional; Model – VABO-80B)
Display	4.3-inch TFT touch Display (visible under bright sunlight and dim light)
Internal Memory	Up to 200 records
Communication	USB (USB 2.0/1.1 Standard-A and USB 2.0/1.1 Standard-B)
PC software	DMP Software
Printer	2.25-inch Built-in Printer
Dimensions	12.5" x 9.8" x 8.0" 318 mm x 249 mm x 203 mm
Weight	4 kg (model with battery)
Operating Temperature	-10 °C to +60 °C
Storage Temperature	-30 °C to +70 °C
Humidity	95% RH non-condensing
Protection Class	IP67 (case closed)
Set of Package	VABO-80, Power Cable, Ground Cable, 3m Test Cable, USB Cable, Printer Paper (x2) USB flash drive, Instruction Manual (Soft Copy), DMP Software, Soft Cable Carrying Case
Options	Hard Carrying Case, Battery (Optional; Model – VABO-80B)

 $Specifications\ are\ valid\ at/under\ 25\ ^{\circ}C\ temperature.\ ^{\ast}Content\ subject\ to\ change\ without\ notice.$ 

# ORDERING INFORMATION

VABO-80



80kV Vacuum BottleTester with Built-in Printer

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80kV Vacuum BottleTester with Built-in Printer & Battery