# VBT-60 Vacuum Bottle Tester

### **Vanguard Instruments Company**

www.vanguard-instruments.com

VBT-60



# **VBT-60**<sup>TM</sup>

The VBT-60 is a microprocessor-based, portable 60 kV dc vacuum bottle tester. This lightweight, portable tester is designed for testing circuit-breaker vacuum bottles in the field and at the shop.

Test voltages can be selected from 10 kV dc to 60 Kv dc in 5 Kv steps. The high-voltage test time can be set from 5 seconds to 2 minutes. The test voltage is raised to the selected voltage and held for the test time duration. After the test time duration has elapsed, the test voltage is returned to zero. If a flash-over condition occurs, such as bottle failure, the test voltage is immediately turned off, a "Failure" message is displayed on the LCD screen, and the "TEST FAIL" LED light on the unit is also illuminated.

The presence of high voltage is indicated by an audible tone and an illuminated "HIGH VOLTAGE" LED light. For additional operator safety, an "ARM" switch must be held down during testing.

The VBT-60 features a back-lit LCD screen (16 characters by 2 lines) that is viewable in both bright sunlight and low-light levels. A turnand-press knob is used to control the unit. An RS-232C interface port is provided for factory calibration and diagnostic testing.

The VBT-60 is furnished with a 10-foot test cable that is terminated with a quick-disconnect test clip. A transportation case is also included.

# Rapidly

## InexpensiveReliable

### Easy to Use Lightweight

High Voltage Connector

**RS-232C** Interface

Ground Cable Connector



S	Automatic	testing	

- 10 kV 60 kV DC output in 5 kV steps
- Selectable test time duration from 5 seconds to 2 minutes
- Digital voltage and current display
- Failure indicator LED
- Very lightweight

#### **Ordering Information** VBT-60 Circuit Breaker Vacuum Bottle Tester

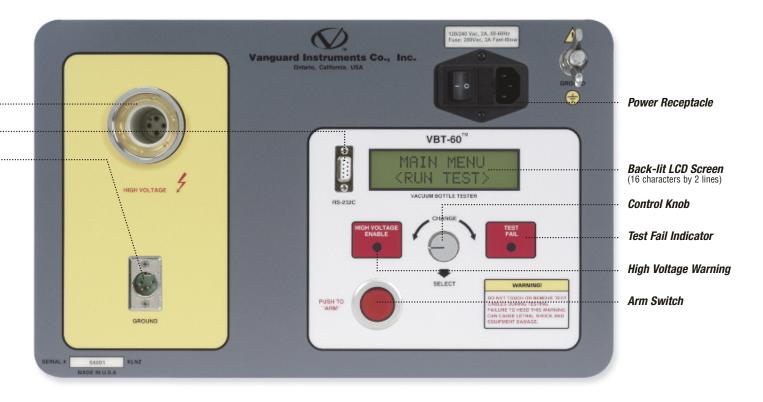
VBT-60, Cable, Case Part No: VBT-60 VBT-60 High Voltage Cable Part No: VBT-60 Hi

Part No: VBT-60 Part No: VBT-60 High Voltage Cable



### **A Portable 60kV Vacuum Bottle Tester**

### **Circuit-Breaker Vacuum Bottles** In the Field and at the Shop



### SPECIFICATIONS

ТҮРЕ	Portable, lightweight, 60 kV dc vacuum bottle tester	
PHYSICAL SPECIFICATIONS	16.8"W x 3.5"H x 10.6"D (42.7 cm by 8.9 cm by 26.9 cm); Weight: 10 lbs (4.53 kg)	
INPUT POWER	2 amps, 90-240 Vac, 50/60 Hz	
OUTPUT VOLTAGE	10kV – 60 kV dc in 5 kV steps	
OUTPUT RIPPLE VOLTAGE	3% max	
DISCHARGE TIME	Maximum discharge time for internal high voltage is 0.3 seconds	
DISPLAY	Back-lit LCD Screen (16 characters by 2 lines); viewable in bright sunlight and low-light levels	
FAILURE INDICATOR	Failure indicator LED illuminates when test current exceeds 100 $$ A, 200 $\mu$ A, 300 $\mu$ A (programmable)	
CONTROL	Single turn-and-press knob	
<b>COMPUTER INTERFACES</b>	RS-232C port (19,200 baud) for factory calibration and diagnostics	
ENVIRONMENT	Operating: -10°C to 50° C (15°F to +122° F); Storage: -30° C to 70° C (-22°F to +158° F)	
HUMIDITY	90% RH @ 40°C (104°F) non-condensing	
ALTITUDE	2,000m (6,562 ft) to full safety specifications	
CABLES	One 10-foot high-voltage cable, one 10-foot high voltage return cable, one ground cable, one power cord	
TRANSPORTATION CASE	Transportation case is included	
WARRANTY	One year on parts and labor	

Note: The above specifications are valid at nominal voltage and ambient temperature of +25°C (+77°F). Specifications are subject to change without notice.

#### Vanguard Instruments Company Reliability Through Instrumentation RVSep10

#### Vanguard Instruments Company, Inc.

Vanguard Instruments Co., (VIC), was founded in 1991. Currently, our 28,000 square-foot facility houses Administration, Design & Engineering, and Manufacturing operations. From its inception, VIC's vision was, and is to develop and manufacture innovative test equipment for use in testing substation EHV circuit breakers and other electrical apparatus.

The first VIC product was a computerized circuit-breaker analyzer, which was a resounding success. It became the forerunner of an entire series of circuit-breaker test equipment. Since its beginning, VIC's product line has expanded to include microcomputer-based, precision micro-ohmmeters, single and three-phase transformer winding turns-ratio testers, winding-resistance meters, transformer tap-changing controllers, megaohm resistance meters, and a variety of other electrical utility maintenance support products.

VIC's performance-oriented products are well suited for the utility industry. They are rugged, reliable, accurate, user friendly, and most are computer controlled. Computer control, with innovative programming, provides many automated testing functions. VIC's instruments eliminate tedious and time-consuming operations, while providing fast, complex, test-result calculations. Errors are reduced and the need to memorize long sequences of procedural steps is eliminated. Every VIC instrument is competitively priced and is covered by a liberal warranty.

Vanguard products are available from:



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