

Arrester/Leakage Testers

HI-TEST[®] MOV ARRESTER/ LEAKAGE TESTERS



DESCRIPTION

The Hi-Test family of Arrester/Leakage Testers are fully portable and easy to use. They are current limited high voltage testers that can be used for safe and non-destructive testing of MOV arresters, insulators and a wide variety of other parts and materials. They identify faulty arresters, assist in reducing line losses and reduce customer complaints. Non-visible failures of surge arresters are the source of operational problems that are difficult to locate in the field and costly to utility companies. Surge arresters are subject to both thermal and moisture problems which can produce gradual failures over time with no accompanying external visual evidence. **Radio frequency interference, television interference and blinking light complaints are all common symptoms of non-visible failures on distribution circuits.**

BENEFITS

- Find non-visible defects in MOV arresters safely & conveniently
- Test MOV arresters for shorts and sparkover voltage.
- Test bell type, distribution class polymer and cross arm pin insulators within the voltage range of the units, as well as fuses, transformer bushings and tank lids by imposing voltage and measuring the leakage current
- A fully portable and easy-to-use solution for safe and non-destructive testing of arresters
- Stretch your materials budget by testing arresters and insulators for re-use potential
- Use in the field and in the shop
- Increase quality assurance by randomly testing new material purchases
- Ideal for transformer rebuild shops and maintenance yards
- Non-destructive testing makes it extremely valuable
- Trouble shoot service calls and RFI/TVI complaints in the field caused by non-visible partial shorts in arresters
- Use in training programs to demonstrate the function of arresters and other materials as they respond to increasing voltage



HD ELECTRIC COMPANY

1475 LAKESIDE DRIVE • WAUKEGAN, ILLINOIS 60085 U.S.A.
PHONE 847.473.4980 • FAX 847.473.4981 • website: www.HDElectricCompany.com

FEATURES

- Tests MOV arresters up to 25kV class
- Voltage and current displayed on easy to read LED's
- Auto shut-off
- Lightweight
- Pivoting handle & belt clip for portability and hands free use
- Powered by a 12 VDC rechargeable, sealed lead-acid battery
- Operates approximately 3 to 5 days on a single charge

OPERATION

The Hi-Test Arrester/Leakage Tester has two test leads which, when connected to the top and bottom of the arrester, enables the user to increase the DC voltage that is being applied to the arrester. The user can then measure the exact voltage at which the arrester conducts. The unit will display both the maximum voltage an arrester will support at full conduction and the current leakage at any voltage imposed on the arrester. Both the applied voltage and current leakage are displayed on bright, easy-to-read LED displays. The voltage is displayed in DC and equivalent AC increments. The current is displayed on a 50 microamp LED meter scaled in 5 microamp steps with convenient "full on" display when current leakage exceeds 50 microamps. The Hi-Test Arrester/Leakage Tester can also be used to test insulators, fuses, transformer bushings and tank lids. The tester will not properly test gap type or hybrid MOV/gap type arresters such as Hubbell Optima and Cooper VariGAP. HDE's AT-100 Lightning Arrester & Leakage Tester will test this type and all other types of lightning arresters. See the AT-100 literature on the HDE website for details.

VOLTAGE RATINGS

Product	DC Output Voltage Range	For Arrester Classes Up To	Common Arrester Ratings That Can Be Tested	Voltage Resolution
HiSat-15	0 - 21kV	15kVAC	3, 6, 9, 10*, 12*, 15*kV	700 VDC
HiSat-25	0 - 30kV	25kVAC	3, 6, 9, 10, 12, 15, 18, 21*, 24*kV	1000 VDC

*Tests for sparkover voltage on MOV types only.

ORDERING INFORMATION

HiSat-15	Surge Arrester/Leakage Tester for up to 15 kV Class Arresters; Includes Battery, (1) High-Voltage Test Lead, (1) Ground Return Lead, (1) Static Ground Lead and 120 VAC Charging Adapter. Dimensions: 12" x 5" x 8" (31 cm x 13 cm x 20 cm)
HiSat-25	Surge Arrester/Leakage Tester for up to 25 kV Class Arresters; Includes Battery, (1) High-Voltage Test Lead, (1) Ground Return Lead, (1) Static Ground Lead and 120 VAC Charging Adapter. Dimensions: 12" x 5" x 8" (31 cm x 13 cm x 20 cm)
HiSat-15/220P	Surge Arrester/Leakage Tester for up to 15 kV Class Arresters; Includes Battery, (1) High-Voltage Test Lead, (1) Ground Return Lead, (1) Static Ground Lead and 220 VAC Charging Adapter - for International Customers Dimensions: 12" x 5" x 8" (31 cm x 13 cm x 20 cm)
HiSat-25/220P	Surge Arrester/Leakage Tester for up to 25 kV Class Arresters; Includes Battery, (1) High-Voltage Test Lead, (1) Ground Return Lead, (1) Static Ground Lead and 220 VAC Charging Adapter - for International Customers Dimensions: 12" x 5" x 8" (31 cm x 13 cm x 20 cm)
075-02000-12V	12 VDC Rechargeable Battery
025-02015-SUB	Red High-Voltage Test Lead
025-02190-SUB	Black Ground Return Lead
025-02195-SUB	Black Static Ground Lead
050-02030-SET	Complete Test Lead Set
575-02012-SAT	Wall Storage Rack
025-02070-120V	120 VAC Charging Adapter
050-02000-12V	12 VDC Charging Cord
050-02025-220V	220 VAC Charging Adapter
B-5	Zippered Carrying Bag



Front panel of HiSat-25 unit



HiSat-25 testing a porcelain arrester

To test all arresters, including gap or hybrid MOV/gap type, see HDE's AT-100 Lightning Arrester & Leakage Tester literature. The AT-100 is a two-stick live line tester designed to test disconnected lightning arresters on a power distribution system.



VariGAP® is a registered trademark of Cooper Industries, Inc. of Houston, TX.
Hubbell® is a registered trademark of Hubbell Power Systems Inc. of Centralia, MO.

All sales are subject to the terms and conditions of the Limitation of Warranty and Liability set forth in the product Instruction Manual and at www.HDElectricCompany.com. Users must read and agree to the Limitation terms, as stated, before using the product.

HD Electric Company is committed to ongoing review and improvement of its product lines, and thus reserves the right to modify product design and specifications without notice.

HD Electric Company products are available through HDE sales representatives worldwide.

Printed in U.S.A. © HD Electric Company 2013 • Bulletin No. HiSat-300c