



Sivananda Electronics

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Model Number: **ADST-10**

AUTOMATIC DIGITAL SURGE COMPARISON TESTER



High Throughput



Low Power Consumption

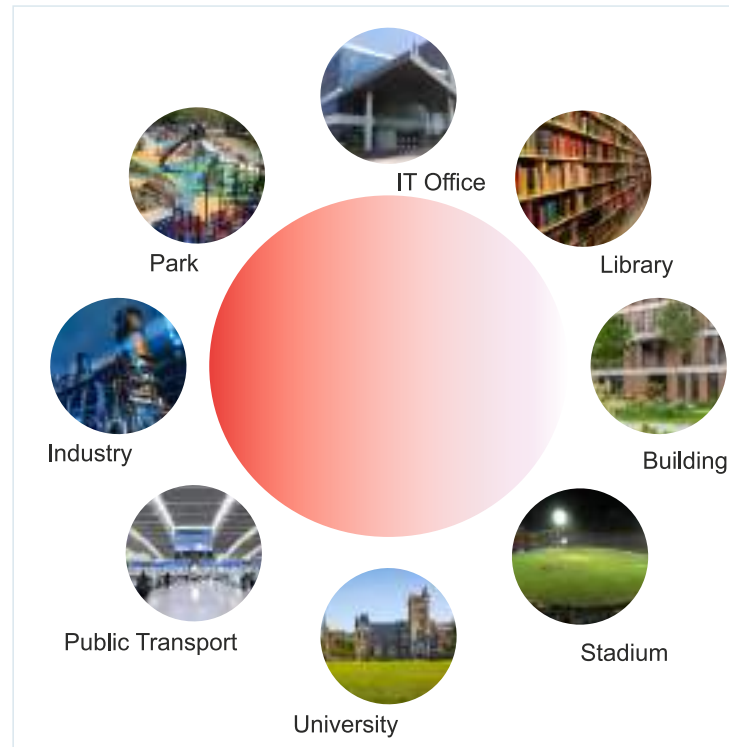


Best After Sales Service

Application

This tester is widely used for testing stator coil of newly and rewind motors. It helps in finding and predicting the faults in motors before it happens. Extremely portable tester that can be easily used in the motor shop and in field to test the following:

- 1 ϕ & 3 ϕ windings
- LT coils
- AC, DC motors
- Stators
- Transformer coils
- Solenoids & Chokes



Features / Benefits

Features:

- ❖ Highly reliable, accurate and cost-effective.
- ❖ Designed by Sivananda, is known as the most comprehensive tester to check the quality of electrical windings.
- ❖ Widely appreciated by motor manufacturers worldwide and has immensely improved the quality of the LT motors in the industry.
- ❖ Extremely versatile and a valuable tool to easily test the stator coils in the motor shop or field.

Benefits:

- ❖ Fully automatic tester with Laptop/Desktop interface to store and retrieve the test results. Even easy printouts.
- ❖ Surge Wave form captured by single pulse triggering.
- ❖ Pass/ Fail Detector
 - By Area comparison
 - By Differential area comparison
 - By Corona comparison
 - Coil to Coil Comparison
 - Wave form storage comparison
- ❖ Number of cycles to be Compared: Able to compare predefined cycles by setting start and end points of wave form to be compare.
- ❖ Testing Software: Windows Xp and above
- ❖ Report Generation in PC with Serial Number and Date wise:
 - Pass/Fail Report
 - Raw Report
 - Cumulative Report
- ❖ With Statistical Analysis Software

Principle of Suge Comparison Tester

The Surge Comparison tester checks the strength of ground insulation that consists of enameled insulation. It detects the insulation failures such as turn-to-turn shorts, layer-to-layer shorts, coil-to-coil shorts, winding-to-winding shorts, and phase-to-phase shorts. Open circuit and ground detection are other benefits of surge testing.

It uses the principle of impedance balance to test the quality of electrical windings.

Works as a capacitive-discharge system. A capacitor is charged with high voltage and then discharged into the winding, through a solid-state assembly. This sequence is repeated thus stressing the insulation of the winding with high voltage pulses.

The resulting voltage decay pattern of two winding is then displayed on the Laptop. The waveform pattern will be perfectly superimposed for good windings but in case of a defective winding a double wave pattern will appear on the screen as one wave pattern from the good winding plus the erratic pattern from the faulty winding.

Specifications

- ❖ Surge Frequency: 50Hz, $\pm 3\%$
- ❖ Operating Voltage: 230V, $\pm 10\%$
- ❖ Power Consumption: 130W
- ❖ Weight: 40Kg
- ❖ Physical Dimensions
 - Width: 550mm
 - Depth: 550mm
 - Height: 550mm

Surge Test Voltage to be applied = $\sqrt{2} \times (2 \times E + 1000)$

Test Specifications

- ❖ *Test Position - I For Testing of Stator Coils only*
 - Max Surge Voltage: 10000V
 - Max Pulse Current: 630A
 - Max Pulse Energy: 5 Joules max. two Channel

- ❖ *Test Position - II For Testing of Armatures only*
 - Max Surge Voltage: 1000V
 - Max Pulse Current: 1000A
 - Max Pulse Energy: 2.5 Joules max. one Channel

Shipment List

- Instrument
- Lead Set
- Instruction Manual

Optional Accessories

- ❖ Armature test jig.
- ❖ Bar-to-Bar armature test probe.
- ❖ 1 KVA servo stabilizer.
- ❖ Foot Switch for hands free operation.
- ❖ Trolley for Instrument.
- ❖ Laptop/PC

Warranty

Sivananda Electronics warranties its products against defects in material and workmanship for a period of one year from the date of installation or 15 months from the date of dispatch, whichever is earlier. This warranty excludes normal wear on finishes or damage that occurs due to abuse or misuse.

Our Other Products

- ❖ **Instruments:** 200+ types of test equipment's for Power, Wire & Cable, Capacitor, Oil & Petroleum industries are developed by in-house R&D Lab. Surge Testers, Automatic C&Tan Delta Bridges, Transformer Windings Resistance Meters, Oil Insulation Test Kits, Oil Tan Delta, Volume Resistivity & Dielectric constant Meter, Insulation Resistance Tester, Contact Resistance Meter etc.
- ❖ **Security:** Turnstiles, Tripods, Barriers, Metal Detectors, Bollards etc.

Disclaimer : To Keep pace with the technology Sivananda Electronics reserves it's right to update the system without prior consent.

About Us

- 50 years (in 2020) of service to India.
- 1st to develop metal detectors for security in India. Made in India.
- 1st to develop Turnstiles in India. Made in India.
- Eclina Awards (1995), Elecrama Awards (1996), NIMA Awards (1999)
- Leading manufacturers of Security Systems and Test & Measuring Instruments in India.
- Largest supplier of Turnstiles in India in the last 25 years
- 150 different types of Electronic Test & Measuring instruments are indigenously developed for many industries.
- Exporting to 70+ countries.