



SIVA INSTRUMENTS

An ISO 9001:2000 Company



Automatic Winding Test System

MODEL: MR-307



Three Phase Stators & Motors



Two Phase Stators



Single Coil



Rotors

Introduction:

Electrical Winding, be it an armature, field coil or Stator coil needs to be tested for various parameters prior to declaring it fit for use. Surge Comparison test, High voltage test, Resistance test are three essential tests carried out on winding to detect faults. The industry needed test equipment, which would enable them to test the windings faster than or at least equal to the rate of production and give the results of these entire tests in one place.

Automatic winding test system is highly sophisticated winding tester to perform automatically Surge Test, High voltage test, Coil resistance test on winding. The entire process is accomplished using a PC based system, which is the central control unit. Adequate safety measures have been provided to avoid accidental corruption of master data and maximum operator safety has been ensured.

Specially designed Insulation Resistance Test with settable PASS/FAIL limits & Resistance Unbalance Test for Stators.

Features

- For Stator Coils, Motor Rotors & more.
- Highpot, Resistance, Surge, direction test.
- Fast and Accurate.
- Quick Model Changes Over.
- Easily Replacement Board.
- PC Based /Windows driven.
- PC Reports.
- USB Printer.
- Pass/Fail Indication.
- Low Cost Masterless Testing.
- Operator Key Console (Optional).

Automatic Winding Test System MODEL: MR-307



Technical Specifications

RESISTANCE TEST

Test method : 4 wire Kelvin (Auto-ranging)
 Resistance Range : Current
 < -20m : 2A
 20m - 200m : 2A
 200m - 2 : 200mA
 2 - 20 : 200mA
 20 - 200 : 20mA
 200 - 2K : 2mA
 2K - 20K (optional): 2mA
Additional Ranges can be customized.
 Resolution : 3 1/2 digits.
 Accuracy : 0.4% F.S. range in each range
 Repeatability : 0.2% F.S. repeatability
 Temp Sensing : RTD Temperature Sensor.
Temp Compensation for 20° C or user defined.

RESISTANCE UNBALANCE TEST

Unit : %
 Resolution : 3 1/2 Digit
 Formula Used : $((RA-RB)/(RA+RB)) \times 100$.

INSULATION RESISTANCE TEST

Settable Pass/Fail : 100M to 1000M

SURGE COMPARISON TEST

Test Voltage : 500 to 3000V in 100V steps.
 Accuracy : +/- 3%
 Pulse energy : 0.2 joules (max.) can be customized.
 Discharge Capacitor : 0.05µF
 Comparison : Highly reliable, error Index algorithm with settable PASS/FAIL.

A.C. HIGH VOLTAGE TEST

Test Voltage : 100 to 3000V in 50V steps.
 Leakage Current : 0 to 100 mA. Settable.
 Accuracy : +/- 3%
 Trip Limit : Programmable upto 100mA
 Duration : 1 to 60 secs

D.C. HIGH VOLTAGE TEST (optional)

Test Voltage : 100 to 5000V in 50V steps.
 Leakage Current : 0 to 100 mA. Settable.
 Resolution : 1 mA
 Accuracy : +/- 3%
 Trip Limit : Programmable upto 100mA
 Duration : 1 to 60 secs.

THERMISTOR TEST (optional)

Range : Upto 200 Kohm

DIRECTION OF ROTATION (optional)

Test Method : Proprietary Method

JIGS AND FIXTURE

Specially designed innovative and worlds compact test fixture with flexibility of customization.
 Dual Test Fixture as a optional facility.

Additional Features

- ◆ Windows based software.
- ◆ Panel Mounted High Resolution graphical LCD Screen.
- ◆ Inbuilt Computer with 80GB HDD, USB printer port.
- ◆ Inkjet Printer.
- ◆ ALL-IN-ONE screen for testing and viewing results.
- ◆ Flexible test configuration.
- ◆ Programmable sampling rate and gain.
- ◆ Custom reports.
- ◆ Statistics and trend management.
- ◆ Multi-language support (optional).

Other Products

- ◆ Digital Winding Analyzers upto 15 KV
- ◆ Automatic C & Tan Delta Bridges
- ◆ Turns Short Testers
- ◆ Insulation Resistance Testers
- ◆ HV Breakdown Voltage Testers
- ◆ Automatic Winding Resistance Meter
- ◆ Micro Ohm Meters
- ◆ Conductivity Meters
- ◆ Enameled Wire Tan Delta System
- ◆ Capacitor Test Equipments

To keep pace with the latest technology Sivananda Electronics reserves the right to update it's system. Hence, information in the brochure is likely to change without notice.



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