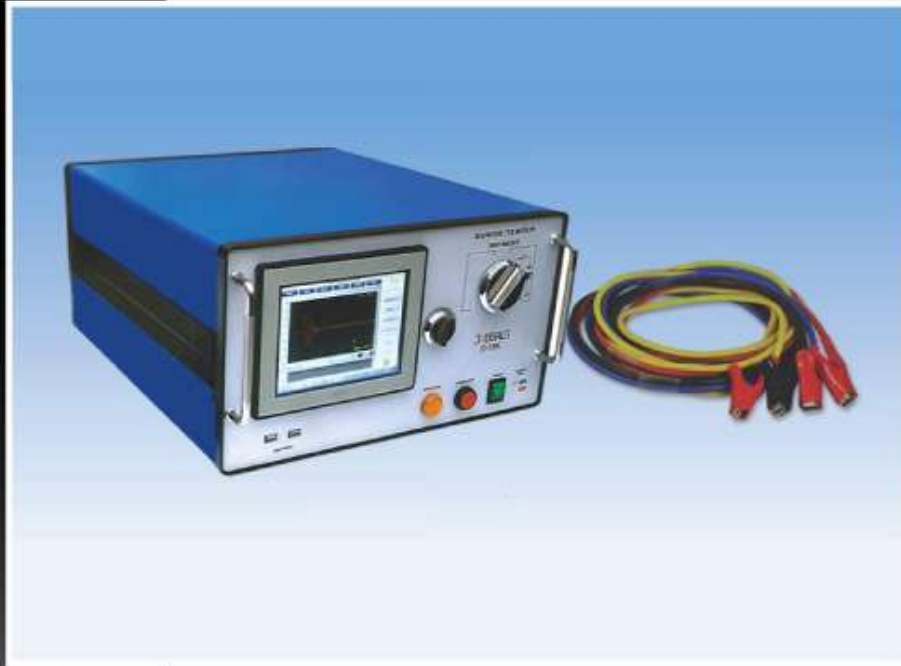


1KV Digital Armature Surge Tester

Model: D-1KAT

The Digital Armature Surge Tester with bar-to-bar test is a cost-effective solution to check the quality of Small to Medium range of DC Armatures. The Bar-To-Bar Test is provided to test the Low impedance of the Series wound Armatures and Field coils of DC Traction Motors. The Surge Tester has an Industrial PC with 8 inch Touch screen Display and software to Store, Recall and Print the Test Reports.



Features

- LABVIEW based software application
- Job work Management to store Models
- Infinite Model Storage capability
- Colour Coded Surge Test waveforms
- Store/Print/Recall Waveforms & Reports
- Peak & Target Surge Voltage Indication
- Software Reports in MS Word
- Graphical & Numerical %EAR display

Specifications of PC

- 8 Inch Touch Screen Display
- Industrial Grade CPU (Intel Dual Core)
- Windows 10 / MS Office / Anti Virus
- Dust Proof / Water Resistant / 0-60 C
- 2 USB Ports, VGA Port
- Wireless Keyboard & Mouse

Applications

The Surge tester is ideally suited for manufacturers of traction motors to check the winding of DC armatures.

Bar-To-Bar Test for DC Armatures (Single Channel)

To perform this test, the armature to be tested is positioned between centers so that it could be rotated. A fixture with adjustable brushes is used to contact the armature at three positions. Two segments with an equal number of bars are then compared and if the two segments are balanced and contain no faults, a single pattern will appear on the Display. Faults are located by noting the change in the pattern as the armature is rotated bar-to-bar. The important advantage surge testing offers when applied to armature is the ability to locate high resistance carbon shorts. These can be major problem and cannot be detected by the low voltage tests normally done. Because the Surge tester utilizes much higher levels, these faults can be determined and located in most of the cases.

- Armature Of DC Motor

Surge Test Voltage to be applied = $\sqrt{2} \times (2 \times E + 1000)$
where E is the operating voltage of the rotating machine



Software Indicator & Controls

- Volts/Div -- Time Base. -- Peak Voltage
- Impulse Rise Time - Pass/Fail Indicator
- Graphical & Numerical %Error Display
- Save, Recall & Print Reports

Benefits

- Footswitch For Hands Free Operation
- Highly Sensitive Fault Detection Capability
- 8 Inch Touch Screen Colour Display
- Leads Energized Warning Indicator
- Hand Held Probe Applicator For Higher Current Capabilities Of Bar-To-Bar In Order To Detect The TIG Weld Short & High Resistance Joints
- Printer Can Be Connected To Tester Via USB

Model	D-1KAT
Test Voltage	0 - 1,000 Volts (Adjustable)
Pulse Current	1000 Amps
Pulse Energy	2.5 J
Capacitance	0.5 μ F/channel
Impulse Rise Time	0.1-0.2 μ S (In accordance with IEEE 522 Standard)
Impulse Repetition Rate	5.0 Hz (5 Pulses per second)
Vertical Sensitivity	125V, 250V, 500V, 1000V
Sweep/TimeBase	4 μ S - 10 mS
Operating Voltage & Frequency	230 V (50/60 Hz) or 110 V (60 Hz)
Power consumption	240 Watts (Max)
Dimensions	435 (w) x 250 (H) x 540 (D) mm Approx.
Gross Weight	45 Kgs
Net Weight	30 Kgs