

AT PRO

AT33 IND

ALL-TEST PRO® 33 IND Motor Tester



Resistance	OK
Stator	Bad
Rotor	OK
Contamination	OK



**Meg-ohm-meters and multi-meters
see only 10% of possible
electric motor faults...**

How will you see the other 90%?

THIS REVOLUTIONARY, EASY-TO-USE INSTRUMENT OFFERS IMMEDIATE INFORMATION ABOUT THE COMPLETE CONDITION OF YOUR STATOR, ROTOR AND CONNECTIONS!

The AT33 IND instrument is the PERFECT TOOL for troubleshooting, inspection of incoming or stored motors before installation, or repair. It quickly shows the complete condition of the Stator Windings, the Rotor, Contamination, Ground Fault and Connections.

EASY AND QUICK TEST TO CHECK YOUR ELECTRIC MOTORS

This instrument presents an exciting breakthrough in off-line (de-energized) testing. Within minutes the operator can get a complete picture of the condition of a motor without having to stress-test the windings or use other more expensive or elaborate instruments, which can be difficult to operate and analyze captured data with.

TWO TESTS IN ONE

The instrument can be used in two modes: Static and Dynamic. Both quickly collect data in auto mode and there is no need to operate a lot of difficult to understand buttons.

THE STATIC TEST can be performed at the control panel and takes only a few minutes per motor! It tests “the whole loop”, i.e. cable, connections and stator/rotor from the starter/motor drive. No need to disconnect drives and machinery for the phase to phase test. It reports whether a change has occurred between a prior test (the baseline) and the present test.

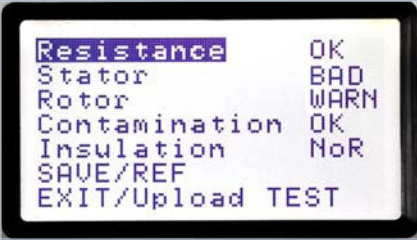
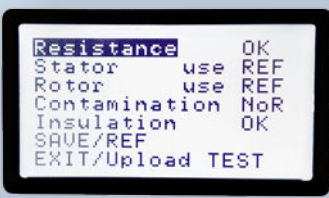
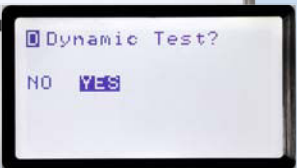
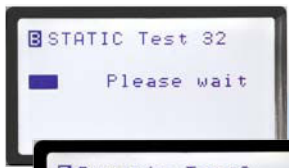
It measures Resistance, Inductance, Impedance, Capacitance and Phase Angle. The fault indicator is not dependent on Rotor position.

The Static test is compared to a base-line test that can be retrieved from “Reference Value Static” records in the instrument, or from the optional software.

Meg-ohm-test with 500 and 1000 V reading up to 999 Mohm is standard.

NO NEED TO CARRY ALONG HARD TO READ USER MANUALS

The unit can be used stand-alone or with software, which enables you to see all the underlying data from the test. For accuracy see our specifications.



DYNAMIC TEST BY ROTATING SHAFT

The AT33 IND Dynamic Test analyzes the results for you by showing Bad, Warning or OK for Resistance, Stator, Rotor and Contamination. It is developed for testing <1000V induction motors with squirrel cage rotor.

If the Static test needs to be further evaluated, or if no baseline is available a Dynamic test should be done. The DYNAMIC TEST is done with the rotor shaft disconnected to the machinery.

It measures in real time, during the manual rotation of the shaft, several measurements. Any problem is easily recognized by even inexperienced operators.

It also collects data used for a “signature” of the Stator and Rotor and these signatures allow for a more in-depth evaluation by an experienced user and supports data of other faults showing in the report.



ACCURACY and EASY TESTING

The AT33 IND comes with high-quality test leads and 4 wire Kelvin Clips for very accurate data collection. Please see specifications.

The lithium batteries support more than 8 hours of continuous use.

No need to carry along a manual when testing, all instructions are shown step-by-step on the instrument's large screen. The result is then automatically shown on the screen as well. By calling up a prior test of the same motor you can easily see if a change has occurred.

The AT33 IND is made for safe operation and for harsh environments incorporating CE Certification and a casing rated CAT III. The tester has a large memory storage capacity for reference and test-data and can be used as a stand-alone tester without software.

If our software is used, the instrument quickly up-loads its test-data and the report can be printed. The data can also be further analyzed by a technician and compared to prior data of the same motor; or motor of the same model to create a history of any problems and solutions.



Standard Kelvin test leads set



Optional custom Kelvin test leads set



Specifications AT33 IND



Test Frequencies

50, 100, 200, 400, 800 Hz

Test Value Static / Reference Value Static

0.01 – 10000 ±1%, (Dimensionless calculated value)

Stator Test Dynamic

Repeatability ±1%, (of measured data and calculated deviations)

Rotor Test Dynamic

Repeatability ±2%, (of measured data and calculated deviations)

Resistance

0.01 – 999 Ω measurement range

0.01 – 99.9 Ω ±1%, Max Resolution: 0.01 mΩ

100 Ω - 500 Ω ±1.5%, displayed as whole numbers

501 Ω - 999 Ω ±2.5%, displayed as whole numbers

Relative Accuracy "Phase to Phase" ± 0.1%

True 4-wire Kelvin measurement

(Compensation for thermoelectric offset voltages)

Dissipation factor - DF (frame – stator)

1 – 100% measurement range (expressed as a percentage)

1 – 10% ±0.5 (C = 10 – 1000 nF)

10 – 30% ±1.0

(This specification is based on battery operation and

USB not connected to PC)

Capacitance (frame – stator)

2 – 2000 nF measurement range

10 – 2000 nF ±5%

(This specification is based on battery operation and

USB not connected to PC)

Insulation Resistance

0 – 999 MΩ @1000V, 0 – 500 MΩ @500V

1 – 100 MΩ ±3%, all other values ±5%

Enclosure

Material - Polycarbonate, UL94-V2

Safety

According to IEC 61010-1 cat.III 1000V

Approvals

CE

Keyboard

Sealed tactile touch, XL size keys



Connections

3 x Motor input/output - push-pull connectors 4-pole High Voltage

output - Ø

4mm safety jack

PC communication - USB type B connector

Charger input - 2.5mm diameter center pin DC-jack

Display

Graphic LCD, monochrome 128 x 64 pixels (3.1")

Viewing Area = 69 x 36.5mm, white LED backlight

Batteries

2 x Li-ION cells with ≥ 2100 mAH capacity

Temperature range storage

-20 °C to +60 °C (-4 °F to +140 °F)

Temperature range operating

-10 °C to +50 °C (+14 °F to +122 °F)

Humidity

0-80% relative humidity, non-condensing

EMC

• EN61000-6-4 (Emission)

• EN61000-6-2 (Susceptibility)

Instrument Specifications

Size: 126 x 218 x 51 mm (5"x8.6"x2") (WxLxH)

(basic enclosure size without minor protrusions)

Weight: 0.7 kg (1.5 lb.)

Shipping Specifications

Gross Size: 45.7x40.6x15.2 cm (18"x16"x6") (WxLxH)

Gross Weight: 5.0 kg (11 lb.)

Accessories NOT Included

Windows XP/7 based software for further analysis,

reporting, trending and database storage

1x USB cable 1m

Soft carrying pouch for instrument and test leads

Accessories (included)

3x Test Leads with Kelvin Clips and push-pull connectors

1x Test Lead with 4mm safety plug and MC "Dolphin" clip

Charging adapter, Universal input type 100-240VAC,

output 9VDC @ 1.7A

Attaché type hard case with pre-cut foam liner

User Manual on CD

Warranty: 1 year limited warranty;

Optional 2 years available with calibration

Patent Pending

ALL-TEST Pro, LLC

P.O. Box 1139

Old Saybrook, CT 06475

Tel 860-399-4222

Fax 860-399-3180

Email info@alltestpro.com

Web www.alltestpro.com

Represented by:

