MOTOR CIRCUIT ANALYSIS™ (MCA™) MOTOR TEST INSTRUMENT





Safe, non-destructive MCA<sup>™</sup> test **analyzes complete stator and rotor electrical health** in AC induction and synchronous motors and evaluates the electrical health of DC motors, generators, transformers, and more.

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# WHY TEST MOTORS? BECAUSE MOTORS FAIL

Not all winding faults start as ground faults. Instead, they can start as a weakness in the winding insulation system that may eventually fault to ground when the motor stops running.

Motor testing is integral to the success and efficiency of your business. ALL-TEST Pro instruments ensure that testing your motor is safe, easy, and dependable.

The ALL-TEST PRO 7™ PROFESSIONAL uses our proven, patented technology to look beyond vibration, temperature, and ultrasound test methods - giving you instant answers on your motor's health.

Whether testing an AC or DC motor or a transformer, on-screen prompts step you through the testing process – **no user manual needed.** In just a few minutes, anyone can learn to use it.

## AT7™ PROFESSIONAL



### Tests Take Less Than 3 Minutes

Analyze complete stator and rotor electrical health in AC induction & synchronous motors.



## Predict Faults Before They Happen

Detects faults at their earliest stages before motor failure, including deteriorating or contaminated insulation, as well as "deep" winding faults.



## Perform Tests Anytime, Anywhere

With unmatched portability, ease of use, and safety features, the AT7™
PROFESSIONAL enables technicians to evaluate equipment in the field, on the shop floor, or at a service facility.



## Maximize Productivity & ROI

Finding just one fault using the AT7™
PROFESSIONAL can save your organization countless hours of downtime and provide thousands of dollars in savings.

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Significantly Increase Your
Plant's Profitability with the
ALL-TEST PRO 7™ PROFESSIONAL.



Tests all types of motors (any voltage) including AC induction and synchronous; DC (series, shunt, compound); AC and DC traction; servo. Plus, generators, transformers, single phase motors and other coil-based devices. The health of all motor components is evaluated, including, but not limited to induction windings and rotor, DC field windings and armature, field and rotor coils in synchronous motors, primary and secondary windings in transformers; associated connections and cables.

## PATENTED TECHNOLOGY

### Motor Circuit Analysis (MCA)™

Rapid evaluation of the entire motor circuit. A deenergized non-destructive test method to assess the health of a motor from the Motor Control Center (MCC) or directly at the motor. Immediate and complete information on the status of the Stator, Rotor, Connections, Contamination, and Insulation to ground.

# Patented Dynamic Stator and Rotor Signatures

Used to evaluate the condition of the stator and squirrel-cage rotor in a single test. Perfect for testing new and repaired motors prior to acceptance.

#### Patented Test Value Static (TVS)™

TVS<sup>™</sup> is a sum calculated from the 3-phase MCA<sup>™</sup> static test and is used as a reference value for the motor. Common types of faults in the rotor and stator windings will change TVS<sup>™</sup>.

## **OBTAIN RETURN ON INVESTMENT IN WEEKS (OR DAYS)**

Test newly installed motors to ensure proper installation and prevent startup failure.

Test motor spares to ensure they are in good condition and ready for service. Troubleshoot motors that have quit running by testing from the MCC or at the motor.

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## **EASY TO USE SOFTWARE**

MCA PRO™ and MCA PRO™ Enterprise software for Predictive Maintenance, Troubleshooting, and Quality Control of Electric Motors and Transformers.

- Easily Organize and manage motors and test records
- Create complete database for plant and motor nameplate data
- Provides trending and diagnostics for AC & DC motors and transformers
- Test and trend analysis reports

## The ALL-TEST PRO 7™ PROFESSIONAL includes:

- 3x Test Leads with heavy duty 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
- MCA PRO™ Software Dongle and software download certificate
- 1x USB cable 1m
- Durable and rugged hard case with pre-cut foam liner
- User Manual
- Warranty: 1 year limited; Optional 2 years available with calibration



REPRESENTED BY

#### The ALL-TEST Pro Promise

ALL-TEST Pro delivers on the promise of true predictive maintenance and troubleshooting, with innovative diagnostic tools, software, and support that enable you to keep your business running. We ensure the reliability of motors in the field and help to maximize the productivity of maintenance teams everywhere, backing every ALL-TEST Pro product with unmatched motor testing expertise.

**ALL-TEST Pro** 

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