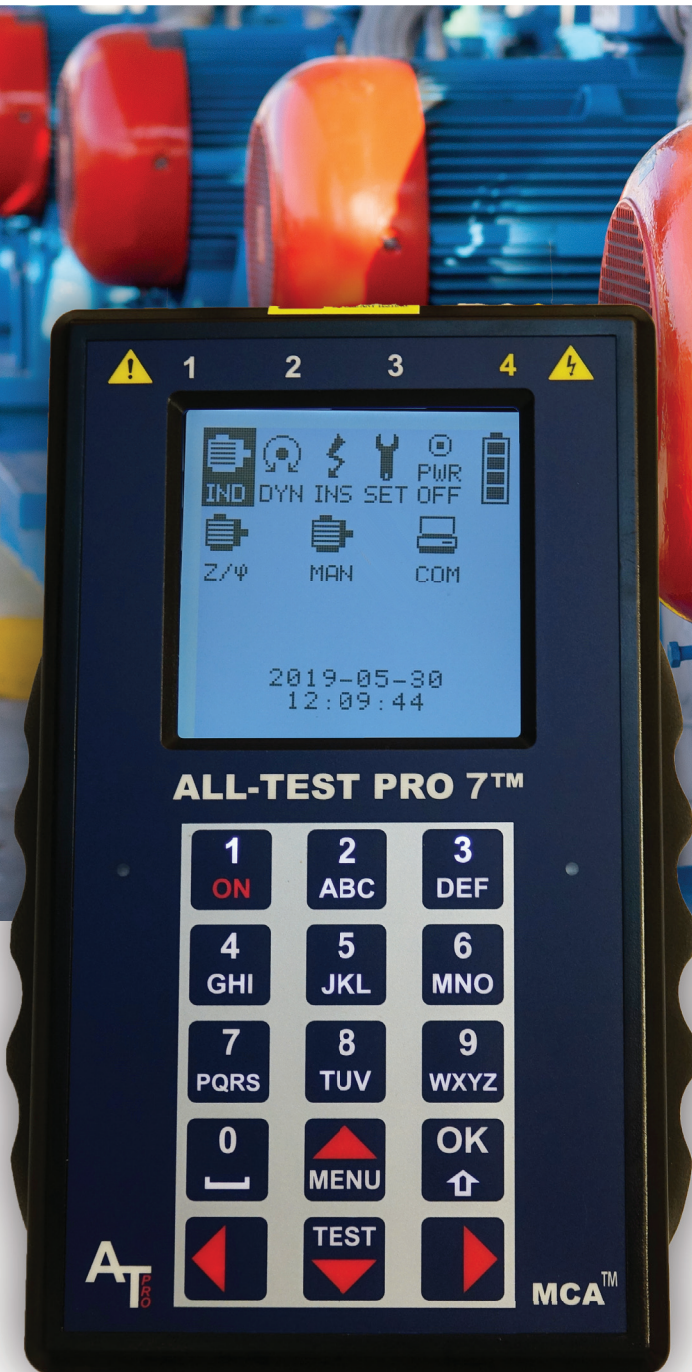


ALL-TEST PRO 7™
MOTOR CIRCUIT ANALYSIS™ (MCA™)
MOTOR TEST INSTRUMENT



Get the motor health data you need to make a quick and informed decision.

- Motor Circuit Analysis MCA™
- Patented Test Value Static™ (TVS™)
- Patented Dynamic Stator and Rotor Signatures
- MCA Basic™ Software

Analyzes **complete stator and rotor electrical health** in AC induction and synchronous motors and generators.

ALL-TEST PRO 7™

MOTOR CIRCUIT ANALYSIS™ (MCA™)

MOTOR TEST INSTRUMENT

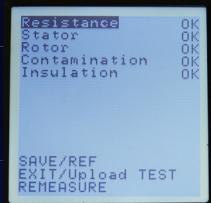


WHY TEST MOTORS? BECAUSE MOTORS FAIL

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



Onscreen prompts step you through the testing process - **no user manual needed**. In just a few minutes, anyone can learn to use it.

AT7™



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™ 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™ can save your organization countless hours of downtime and provide thousands of dollars in savings.

LEARN MORE AT ALLTESTPRO.COM

ALL-TEST PRO 7™

MOTOR CIRCUIT ANALYSIS™ (MCA™)
MOTOR TEST INSTRUMENT



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



Tests **all types of AC motors** (any voltage) including induction, synchronous, and single phase motors. The electrical health of all motor components is evaluated, including stator windings and rotor; 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™ is a sum calculated from the 3-phase MCA™ 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™.

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.

ALL-TEST PRO 7™

MOTOR CIRCUIT ANALYSIS™ (MCA™)
MOTOR TEST INSTRUMENT



EASY TO USE SOFTWARE

MCA Basic™ Software for Predictive Maintenance, Troubleshooting, and Quality Control of Electric Motors

- Easily organizes and manages motors and test records.
- Allows you to create complete databases for plant and motor nameplate data.
- Provides trending and diagnostics for AC motors.
- Test and trend analysis reports.

The ALL-TEST PRO 7™ 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 Basic™ 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

P.O. Box 1139

Old Saybrook, CT 06475 USA

Tel: 860-399-4222

Email: info@alltestpro.com

Web: alltestpro.com

LEARN MORE AT ALLTESTPRO.COM

COPYRIGHT 2019 © ALL-TEST PRO

Version 1 - Specifications are subject to change without notice.

ALL-TEST PRO 7™ | ALL-TEST PRO 7™ PROFESSIONAL

PATENTED TECHNOLOGY

MCA™ | TVS™ | DYNAMIC STATOR AND ROTOR SIGNATURES



Get the motor health data you need to make a quick and informed decision.

SPECIFICATIONS

Measurement	Accuracy and Measurement Range	Max Resolution	Relative Accuracy (Phase to Phase)
Test Frequency	50, 100, 200, 400, 800 Hz		
Test Value Static™ (TVS™)	0.01 – 10,000 ± 1% <i>(Dimensionless calculated value)</i>		
Stator Test Dynamic	Repeatability ± 1% <i>(of measured data and calculated deviations)</i>		
Rotor Test Dynamic	Repeatability ± 2% <i>(of measured data and calculated deviations)</i>		
Resistance	0.01 – 999 Ω total range		
	0.01 – 99.9 Ω ± 1%	0.01 mΩ or one count	± 0.1%
	100 – 500 Ω ± 1.5%	Displayed as whole numbers	± 0.1%
	501 – 999 Ω ± 2.5%	Displayed as whole numbers	± 0.1%
	True 4-wire Kelvin measurement <i>(Compensation for thermoelectric offset voltages)</i>		
Impedance	0.1 – 999 Ω ± 2%	0.01 Ω or one count <i>(whichever is greater)</i>	± 0.2%
Inductance	1 – 999 mH total range		
	1 – 200 mH ± 2%		± 0.2%
	All other values ± 3%		± 0.2%
Phase Angle	1° – 90° ± 1°	0.1°	± 0.1°
I/F (current/frequency)	-50% – +99% ± 1%	0.1%	± 0.1%
Dissipation Factor - DF (frame - stator)	1% – 100% total range (expressed as a percentage)		
	1% – 10% ± 0.75% (C = 10 – 1,000 nF)		
	1% – 10% ± 1.0% (all other values of C within range 2 – 2,000 nF)		
	10% – 30% ± 1.0% (this specification is based on battery operation and USB not connected to PC)		
Capacitance (frame - stator)	2 – 2,000 nF total range		
	10 – 2,000 nF ± 5% (this specification is based on battery operation and USB not connected to PC)		
Insulation Resistance	0 – 5000 MΩ total range @ 500 V or 1,000 V		
	1 – 999 MΩ ± 3%		
	All other values ± 5%		

FAST AND ACCURATE MOTOR TESTING ANYTIME, ANYWHERE. ALLTESTPRO.COM

ALL-TEST PRO 7™ | ALL-TEST PRO 7™ PROFESSIONAL

PATENTED TECHNOLOGY

MCA™ | TVS™ | DYNAMIC STATOR AND ROTOR SIGNATURES



CERTIFICATION SPECIFICATIONS

Certification CE
Safety IEC 61010-1 3rd Edition
Calibration Certificates Optional (contact distributor for details)
EMC Emission: EN61000-6-4 Immunity: EN61000-6-2, EN61000-4-2, EN61000-4-3

EQUIPMENT OPERATING RANGE SPECIFICATIONS

Storage Temperature Range -20 °C – +55 °C (-4 °F – +131 °F)
Operating Temperature Range -10 °C – +50 °C (+14 °F – +122 °F)
Humidity 0 – 80% relative humidity, non-condensing

HARDWARE SPECIFICATIONS

Enclosure Size (W x L x H) 126 x 218 x 51 mm (5" x 9.6" x 2") (basic enclosure size without minor protrusions)
Enclosure Material Polycarbonate, UL94 V-0 (Flammability)
Enclosure Weight 0.7 kg (1.55 lb)
Batteries 2x Li-ION cells with ≥ 2100 mAH capacity, UL 1642 (Safety)
Display Graphic LCD, monochrome 128 x 128 pixels (3.8"); white LED backlight
Keyboard Alphanumeric, sealed tactile switches with backlight overlay
Connections 3x Motor input/output: push-pull connectors 4-pole High-voltage output: Ø 4 mm safety jack PC communication: USB type B connector Charger input: 2.5 mm diameter center pin DC-jack
Internal Memory Stores up to 500 test and REF test records

INCLUDED ACCESSORIES

Test Leads 3x with heavy duty Kelvin Clips and push-pull connectors 1x with 4 mm safety plug and MC "Dolphin" clip
Charging Adapter Universal input type 100 - 240 VAC, output 9 V DC @ 1.7 A
Software Refer to software specification sheet ALL-TEST PRO 7™ - MCA Basic™ Software ALL-TEST PRO 7™ PROFESSIONAL - MCA PRO™ Software
Languages Available in English, Spanish, Chinese, and Portuguese
PC Communication 1x USB cable (1 meter)
Carrying Case Durable and rugged hard case with pre-cut foam liner

SUGGESTED ACCESSORIES (NOT INCLUDED)

Carrying Pouch Contact distributor for options Soft carrying pouch for instrument and test leads
Software Refer to software specification document MCA PRO™ Enterprise Software
Training Demo Motor Contact distributor for options
Test Leads Contact distributor for options 3x with small Kelvin Clips and push-pull connectors 1x with 4 mm safety plug

MISC

Warranty 1 Year Limited with optional 2 Year with calibration
Trademark ALL-TEST PRO 7™ is a trademark of ALL-TEST Pro
Patent Pending

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

P.O. Box 1139

Old Saybrook, CT 06475 USA

Tel: 860-399-4222

Email: info@alltestpro.com

Web: alltestpro.com

LEARN MORE AT ALLTESTPRO.COM

COPYRIGHT 2019 © ALL-TEST PRO

AT7PRO-V1 - Specifications are subject to change without notice.