

# ALL-TEST PRO 34 EV™

DEENERGIZED TESTING INSTRUMENT  
ELECTRIC VEHICLE PERMANENT MAGNET MOTOR TESTER



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% (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	0.01Ω – 0.1Ω ±(1% of the range full scale +1 digit)	0.01mΩ or one digit (whichever is greater)	± (1% of measured value +1 digit)
	0.1Ω – 99.9Ω ±(1% of measured value +1 digit)	1 mΩ or one digit (whichever is greater)	± (0.1% of measured value +1 digit)
	100Ω – 500Ω ±(1.5% of measured value +1 digit)	1Ω	± (0.1% of measured value +1 digit)
	501Ω – 999Ω ±(2.5% of measured value +1 digit)	1Ω	± (0.1% of measured value +1 digit)
	True 4-wire Kelvin measurement (Compensation for thermoelectric offset voltages)		
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%		

# ALL-TEST PRO 34 EV™

## DEENERGIZED TESTING INSTRUMENT ELECTRIC VEHICLE PERMANENT MAGNET MOTOR TESTER



### CERTIFICATION SPECIFICATIONS

<b>Certification</b> CE
<b>Safety</b> IEC 61010-1 3rd Edition
<b>Calibration Certificates</b> Optional (contact distributor for details)
<b>EMC</b> Emission: EN61000-6-4 Immunity: EN61000-6-2, EN61000-4-2, EN610000-4-3

### EQUIPMENT OPERATING RANGE SPECIFICATIONS

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

### HARDWARE SPECIFICATIONS

<b>Enclosure Size (W x L x H)</b> 126 x 218 x 51 mm (5" x 9.6" x 2") (basic enclosure size without minor protrusions)
<b>Enclosure Material</b> Polycarbonate, UL94 V-0 (Flammability)
<b>Enclosure Weight</b> 0.7 kg (1.55 lb)
<b>Batteries</b> 2x Li-ION cells with ≥ 2100 mAH capacity, UL 1642 (Safety)
<b>Display</b> Graphic LCD, monochrome 128 x 64 pixels (3.1"); white LED backlight
<b>Keyboard</b> Sealed tactile switches with backlight overlay
<b>Connections</b> 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
<b>Internal Memory</b> Stores up to 500 test and REF records

### INCLUDED ACCESSORIES

<b>Test Leads</b> 3x with small Kelvin Clips and push-pull connectors 1x with 4 mm safety plug and MC "Dolphin" clip
<b>Charging Adapter</b> Universal input type 100 - 240 VAC, output 9 V DC @ 1.7 A
<b>Software</b> Refer to software specification sheet ALL-TEST PRO 34 EV™ - MCA Basic™ Software
<b>Languages</b> Available in English, Spanish, Chinese, and Portuguese
<b>PC Communication</b> 1x USB cable (1 meter)
<b>Carrying Case</b> Durable and rugged hard case with pre-cut foam liner

### SUGGESTED ACCESSORIES (NOT INCLUDED)

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

### MISC

<b>Warranty</b> 1 Year Limited with optional 2 Year with calibration
<b>Trademark</b> ALL-TEST PRO 34 EV™ is a trademark of ALL-TEST Pro
<b>Patent Pending</b>

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](http://ALLTESTPRO.COM)

COPYRIGHT 2021 © ALL-TEST PRO

AT34EVPRO-V1 - Specifications are subject to change without notice.