PASSION INNOVATES FUTURE

AVL DiTEST

AVL DiTEST EValuate

Figure: May be subject to change

Patent pending

EValuate is a measuring instrument for checking the safety of electric vehicles during periodic technical inspections (PTI). The unit is tailored to your requirements, is extremely quick and easy to use, and, above all, offers you measurement and process reliability.

With EValuate, you can check the safety-relevant parameters of equipotential bonding and insulation resistance at the AC charging port while also checking the immobiliser. The battery-powered measuring instrument consists of two parts: a charging port unit that plugs directly into the vehicle's AC charging port and a test probe with integrated display. This allows you to work flexibly around the entire vehicle. It is also possible to link EValuate to external software via WLAN, allowing measurement results to be documented automatically and information on measurement points to be transferred to EValuate. For example, you can follow a specified sequence of measurement points and ensure that no measurement point is forgotten.

All measurements are assessed automatically in accordance with Regulation ECE R 100 and shown in the appropriate colour. This visual indication is complemented by acoustic feedback, helping you or your test engineer to evaluate the results.

THE ADVANTAGES AT A GLANCE:

MINIMISE OPERATING ERRORS

Insulation resistance measurement at the AC charging port is fully automated. You do not need to insert the probes or adjust the measuring range manually, which significantly reduces the risk of operating errors.

INTEGRATED ADAPTER

While other measuring instruments require an additional adapter for the AC charging port, EValuate has an integrated type 2 AC charging plug as the standard interface, so you can connect the device directly to the vehicle. A crocodile clip that can be plugged into the EValuate makes it possible to measure the equipotential bonding even on vehicles that do not have a charging port, but nevertheless have HV components (e.g. mild hybrid or hydrogen vehicles).

AVL DiTEST EValuate

FOUR-WIRE MEASUREMENT TECHNOLOGY FOR PRECISION

The EValuate is equipped with a Kelvin probe (four-wire measurement technology) so it delivers precise results for equipotential bonding measurements. This eliminates the influence of contact and line resistance, meaning that zero balancing is not required.

SPECIAL IMMOBILISER MODE

To test the immobiliser, the EValuate uses a built-in resistor to simulate the presence of a charging cable at the AC charging port. A special mode can be selected to limit the duration of the simulated resistance for those vehicles that require this functionality.

SIMPLE HANDLING

The display built into the test probe makes the device easy and convenient to use. Thanks to the integrated LEDs, you see the status of the measurement results at a glance.

TECHNICAL SPECIFICATIONS

Equipotential bonding measurement	
Test current	≥ 200 mA (ECE R 100)
Measurement range	0-5 Ω
Resolution	0.01 Ω
Accuracy	± 3.5% ± 1dig
Other	Continuous measurement
Insulation resistance measurement at the AC charging port	
Test voltage	≥ 250 V (ECE R 100)
Measurement range	0-10 MΩ
Resolution	0.01 MΩ
Accuracy	± 1.5% ± 1dig
Other	Fully automated measurement (N, L1, L2, L3, PE)
Immobiliser test	
Proximity Pilot	680 Ω between PP and PE
Other	Permanent activation or timer function
Ambient conditions	
Operating temperature	0 to 45 °C
Transport and storage temperature	-40 to 85 °C (without batteries) -15 to 40 °C (with batteries)
Altitude	2000 m
Humidity	10 to 80% no condensation at max. +25 °C
Mechanical details	
IP protection class	Measuring unit: IP 52 when plugged in Test probe: IP 54
Total weight	1350 g
WiFi	WiFi 4 (2.4 GHz)

Published by: Headquarters: AVL DiTEST GmbH
Alte Poststraße 156, 8020 Graz, AUSTRIA, AVLDiTESTSales@avl.com
German branch: AVL DiTEST GmbH
Schwadermühlstraße 4, 90556 Cadolzburg, Germany, Tel. +49 9103 713-540, fuesales@avl.com
www.avlditest.com

04/2025. May be subject to change