

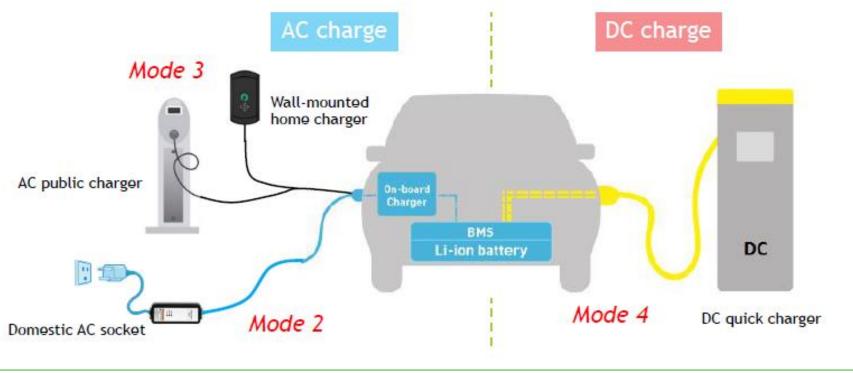
AHK WEBINAR "CHARGING INFRASTRUCTURE FOR E-MOBILITY POLAND"

SOLLUTIONS FOR STANDARD-COMPLIANT TESTING OF CHARGING INFRASTRUCTURE FOR ELECTRIC ROAD VEHICLES AND THE ASSOCIATED PART OF THE ELECTRICAL SYSTEM WITH PRODUCTS FROM GOSSEN - METRAWATT

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AC - DC - E-LADESTATIONEN





INSTALLATION TESTER - PROFITEST MASTER XTRA





- Electrical Installers
- Utilities
- Railways, Military, Hospitals, etc. IEC 60364-6

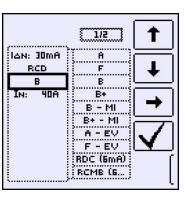


Safety tests at protective devices and electrical installations, also "charging stations"!

USP

- User friendly handling and one hand operation
- Context Sensitive Help function
- Clear reading by biggest display in this tester class
- For one and three phase systems with just one 2 pole adapter
- · Special RCD's can be tested
- U B Measurement without tripping the RCD
- Integrated memory 50.000 objects, to be freely structured
- R ISO with rising test voltage 10 to 1000V
- Bidirectional data exchange with RS232, USB & bluetooth
- DAkkS Calibration Certificate
- CAT III 600V, CAT IV 300 V for industrial applications
- 4 Wire measurement =>
- Automatic Measurement Cable Compensation =>
- High accuracy
- => Safe Instrument to ensure safe installation!





TEST DEVICES / ADAPTERS FOR THE SIMULATION OF THE OPERATING STATES ACC.TO IEC 61851-1



METRALINE PRO-TYP EM I/II/III

1- and 3-phase test adapter for testing e-charging points

- Vehicle simulation (CP)
 Vehicle states A, B, C and E are set using rotary switches
- ➤ Cable simulation (PP) the different codings for charging cables with 13 A, 20 A, 32 A and 63 A as well as "no cable connected" can be simulated using rotary switches
- ➤ Fault simulation
 Simulation of a short circuit between CP and PE using a rotary switch
- Display of phase voltages via LEDs Depending on the e-charging station, one or three phases can be active
- > Testing of e-charging stations with a permanently connected charging cable using an extended CP test pin
- CP socket for evaluating the PWM signal







CHECKING THE OPERATING STATUS ACC. IEC 61851-1



System states - PWM voltage



Condition A: no vehicle available

Condition B: vehicle connected, vehicle not ready for charging

Condition C: Vehicle ready for loading without ventilation

Condition D: Vehicle ready for loading with ventilation

State X: error



TROUBLESHOOTING THE OPERATING STATES OF PWM SIGNALS



Diagnostic device for e-charging stations PROFITEST H+E BASE 32, M525C

Diagnostic device for checking the functional behavior of e-charging stations for electric vehicles

- Vehicle simulation
- Cable simulation
- > Error simulation acc. IEC 61851
- Phases and rotating field; Connection socket type 2,
- ➤ Temperature rise test of charging stations up to 22 kVA, connection of a test consumer to a 32 A CEE socket



ADAPTER FOR TESTING THE DC CHARGING INFRASTRUCTURE



PROFITEST H+E XTRA C EV diagnostic tester for DC charging points for CCS, CHAdeMo and AC

Fully functional test device for simulating a charging process with DC source and load with integrated measuring inputs for connecting an installation tester to check the effectiveness of protective measures.

- Graphic color display with intuitive touchscreen
- Interface for software connection or firmware updates
- Test / Analysing Standards
 - CHAdeMO Version 0.9.1, 1.0.0., 1.0.1, 1.1
 - DC-CCS acc. DIN SPEC 70121 or ISO 15118-1
 - o AC acc. EN 61851-1



ELECTRICAL SAFETY TESTS - CHARGING CABLE MODE 2/3



PROFITEST E-MOBILITY

- Adapter for testing 1- and 3-phase charging cables in accordance with standards

- Mode 2 and 3 by simulating error cases according to DIN VDE 0701-0702 (EN 50678/50699) and manufacturer information





PROFITEST E-MOBILITY, M513R

SAFE DIAGNOSIS OF HYBRID AND ELECTRIC VEHICLES METRAHIT | IM E-DRIVE



Special Features of METRAHIT | IM E-DRIVE

- Unique combination All-In-One:
 Multi- & Milliohm-Meter & ISO measurement & COIL Tester
- Kelvin connection:
 4-wire mΩ-measurement @ 200 mA v 1 A
- Isolation measurement: 50, 100, 250, 500 V and 1000 V
- Measuring category: CAT III 1000 V, CAT IV 600 V
- > ISO probe with START and STORE push buttons 600 V CAT IV
- Modular power supply concept with touch-protected 1000 V CAT III module socket. Modules: quick-change rechargeable battery or optional mains supply module with USB-IF
- ➤ METRAHIT | IM XTRA variant



E-LADESTATION (STROMVERSORGUNGSEINRICHTUNG FÜR DAS ELEKTROFAHRZEUG)



