

PRO-TYP I

Single phase Test Adapter with Type 1 Plug for Testing Charging Stations with the PROFITEST MTECH+ and MXTRA

3-349-881-03
1/11.15

Single Phase Test Adapter with Type 1 Plug for Testing for the Effectiveness of Protective Measures at Electrical Charging Stations with the Profitest Master, Simulating Fictitiously Connected Electric Vehicles and Simulating the Current-Carrying Capacity of Cord Sets per IEC 61851-1

- **Vehicle Simulation (CP)**
Vehicle states A through E are selected with a rotary switch.
- **Cable Simulation (PP)**
via permanently wired cable coding
- **Fault Simulation**
Simulation of a short-circuit between CP and PE by means of a rotary switch
- **Indication of Phase Voltages** via LEDs



Applications

VDE tests in accordance with IEC 61851 can be conducted at electrical charging stations with the help of the PRO-Typ I test adapter in combination with the **PROFITEST MTECH+** or **MXTRA** test instrument.

The test adapter triggers the charging process by simulating an electric vehicle. Only by means of simulation is the charging station's outlet energized so that it can be tested with the **PROFITEST MTECH+** or **MXTRA** test instrument.

The range of applications includes R&D and service.

Applicable Regulations and Standards

IEC 61010-1/EN 61010-1/ VDE 0411-1	Safety requirements for electrical equipment for measurement, control and laboratory use – General requirements
IEC 61851-1 DIN EN 61851-1	Electric vehicle conductive charging system – Part 1: General requirements
EN 60529 VDE 0470-1	Test instruments and test procedures Degrees of protection provided by enclosures (IP code)

Abbreviations and Their Meanings

Abbreviation	Meaning
CP	Displayable vehicle states
PP	Cable type
CP-PE	Resistance coding for enabling charging
PP-PE	Resistance coding for maximum charging current relative to conductor cross-section or cable type
PWM-Signal	Pulse-width modulated signal for communication with the vehicle via the CP cable
RCD	Residual current device

PRO-TYP I

Single phase Test Adapter with Type 1 Plug for Testing Charging Stations with the PROFITEST MASTER

Technical Data

Vehicle Simulation (CP)

States A, B, C, D and E can be simulated in accordance with IEC 61851. The various vehicle states are selected by means of a rotary switch.

- State A: No vehicle connected
State B: Vehicle connected, but not ready for charging
State C: Vehicle connected and ready for charging, venting of charging area not required
State D: Vehicle connected and ready for charging, venting of charging area required
State E: Error – short circuit between CP and PE via internal diode

Cable Simulation (PP)

Permanently wired cable coding

Connection Values

- Input voltage 230 V (single phase)
Frequency 50 Hz
Test consumer power max. 2.9 kVA (no continuous operation!)

Electrical Safety

- Protection class II
Test voltage 3.5 kV AC
Measuring category CAT III 300 V
Pollution degree 2

Mechanical Design

- Dimensions W x L x H = 75 mm x 230 mm x 90 mm
Weight approx. 910 g
Pollution degree IP20

Ambient Conditions

- Operating temperature -10 °C ... +45 °C
Storage temperature -25 °C ... +60 °C
Relative humidity max. 80 %, no condensation allowed

Scope of Delivery

- 1 Test adapter PRO-TYP I
- 1 Set of operating instructions

Order Information

Designation	Type	Article Number
Single phase test adapter with type 1 plug	PRO-TYP I	Z525B
Universal carrying pouch with flexible compartment and display protection	F2010	Z700G

Universal carrying pouch F2010

