TECHNICAL DATA

Eduline AC Charging Technology Set
(item no. 1630778)

WE SHOW HOW E-MOBILITY WORKS!

The practical Eduline AC Charging Technology Set is suitable for learning skills in AC Charging Technology.

The AC Charging Technology Set can be used as a stand-alone application or together with other sets to simulate complete charging parks with up to 12 charging points.

The AC Charging Technology Set consist of:

- AC Charging Technology – Charging Station Board (item no. 1630772)
- AC Charging Technology – Electric Vehicle Board (item no. 1630775)
- AC Charging Technology – Charging Cable (item no. 1630776)

Product features:

- Suitable for use in H-profile systems (Din A4 format) or as desktop device
- Transparent rear casing provides a direct view of the wiring.
- Simulation of an AC Charging process (Mode 3, Type B) [Plug Type 2]
- Energy measurement during the charging process
- Starting the process by push-button
- Starting the process by RFID reader
- Configuration of the CHARX controller
- Using the web interface of the CHARX controller
- Simulation of charging cables with different diameters (changing the PP resistance)
- Simulation of a faulty PP resistance (too big, too small)
- Spectating the charging current and power in relation to the PP resistance
- Display of the EV-Status (A-E)
- Simulation of vehicles with different battery types (Status C or D)
- Spectating the CP-Signal via BNC outlet (oscilloscope)
- Fault-simulation (interrupting CP signal)
- Fault-simulation – residual current triggers RCM
- Simulation of a charging park by connecting multiple charging boards (main/sub mode)
- E-check of a charging station
- Raspberry Pi with HMI for selecting up to four different vehicle types
- Option to set the charging targets
- Display of charging status
- Display of charging costs
- Special 0 Ohm charging cable.

Technical properties:

- Charging Station Board

  - 400 V power supply via safety test leads
  - Control voltage: DC 12 V
  - Dimensions: 450 mm x 297 mm x 130 mm (DIN A4-height)
  - Weight: 4211 g
  - Use in the interior only
  - Ambient temperature: 0°C …35°C
  - Air pressure: 70 kPa..106 kPa (up to 2000 m above sea level)
  - Relative humidity: ≤ 95% (40°C)
  - Protection class: IP20
  - Degree of protection: I

- Electric Vehicle Board

  - 230 V power supply via IEC socket with ON/OFF – switch
  - Control voltage: DC 5 V
  - Dimensions: 345 mm x 297 mm x 110 mm (DIN A4-height)
  - Weight: 2926 g
  - Use in the interior only
  - Ambient temperature: 0°C …35°C
  - Air pressure: 70 kPa..106 kPa (up to 2000 m above sea level)
  - Relative humidity: ≤ 95% (40°C)
  - Protection class: IP20
  - Degree of protection: I

- Charging Cable
  - Length: 1 m
  - Weight: 1034 g

Scope of supply:

The Eduline Charging Technology Set contains the following components.

- Charging Station Board

  - CHARX SEC 3100 – AC Charging controller – 1139012
  - Infrastructure charging Socket – 1164299
  - EEM -EM355 Measuring Instrument – 2908578
  - Differential current monitoring – 1309695
  - RFID device - 1309687

- Electric Vehicle Board

  - Vehicle charging inlet - 1271966