

# **ABL Energy Meter**

## External meter for dynamic load management

The ABL Energy Meter makes it possible to set up dynamic load management for the controller variants of the eM4 Twin Wallbox, which can also be used for intelligent distribution of charging power in group installations. With direct measurements, the Energy Meter, which is designed as a top-hat rail module, can measure up to 63 A, while measurements up to 1,000 A are possible in connection with external current transformers. The Energy Meter ensures optimal use of the available grid connection and at the same time protects the house connection from overload. The Energy Meter can be put into operation very easily using the ABL Configuration app or the ABL user interface. Using it in conjunction with the app or user interface allows users to monitor both their present charging current and the building load.



#### **General information**

| Model               | ABL Energy Meter                                    |
|---------------------|---|
| Product number      | 100000193   |
| EAN number          | 4011721191362                                       |
| Commodity code      | 90328900  |
| Packaging unit (PU) | 1 unit  |
| Items supplied      | Energy Meter, quick start guide, 3 warning stickers |

#### Mains power supply

| Connection cross section in line with EN 60204 | 10 – 25 mm² (mechanical: 1.5 – 25 mm²) |
|--|--|
| Tightening torque for screw terminals          | 2.0 Nm                                 |
| Starting current                               | < 25 mA                                |
| Power supply                                   | 110 V~, ± 10% or 230 V~, ± 10%         |
| Frequency                                      | 50/60 Hz, ± 5 %                        |
| Internal consumption P <sub>max</sub>          | 5 W                                    |

#### Compatibility

| Compatible model series | ABL eM4 Twin Wallboxes |
|-------------------------|------------------------|
|-------------------------|------------------------|

# Measuring circuit for measuring category III

| Limit current I <sub>N</sub> / phase | 63 A                |
|--------------------------------------|---------------------|
| Rated voltage                        | max. 230 / 400 V AC |
| Frequency                            | 50/60 Hz, ± 5 %     |

## Measured values and measurement accuracy

| Voltage         | ± 0.5 %* |
|-----------------|----------|
| Current         | ± 0.5 %* |
| Active power    | ± 1.0 %* |
| Apparent power  | ± 1.0 %* |
| Reactive power  | ± 1.0 %* |
| Power factor    | ± 1.0 %* |
| Active energy   | Class 1* |
| Reactive energy | Class 1* |

<sup>\*</sup>Note: When using external current transformers, the respective measurement accuracy must be taken into account.

## **Operating conditions**

| Ambient temperature during transportation / storage | -25 to 70°C                              |
|---|--|
| Operating temperature                               | -25 to 45°C                              |
| Relative humidity                                   | up to 75% annual average, non-condensing |
| Class of protection                                 | II                                       |
| IP rating   | IP2X                                     |
| Maximum elevation                                   | ≤ 2,000 m above mean sea level           |

## Housing

| Туре                     | Top hat rail module  |
|--------------------------|--|
| Fixing type              | TH35 top hat rail  |
| Housing material         | Glass-fibre-reinforced polyamide                                     |
| Housing colour           | Grey   |
| Interfaces               | 2 × LAN (10 / 100 Mbit)<br>2 × RS485 (half-duplex, max. 115200 baud) |
| Net dimensions (H×W×D)   | 88 × 70 × 65 mm  |
| Gross dimensions (H×W×D) | 89 × 162 × 122 mm  |
| Weight (net)             | 0.3 kg   |
| Weight (gross)           | 0.4 kg   |

Subject to change: All performance characteristics, technical and other specifications are subject to change without prior notice.