

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 and eM4 Single wallboxes, 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 mm ² (mechanical: 1.5 – 25 mm ²)
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 _{max}	5 W

Compatibility

Compatible model series	For Wallboxes eM4 Twin and eM4 Single
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Measuring circuit for measuring category III

Limit current I_N / phase	63 A
Rated voltage	max. 230 / 400 V AC
Frequency	50/60 Hz, $\pm 5\%$

Measured values and measurement accuracy

Voltage	$\pm 0.5\%$ *
Current	$\pm 0.5\%$ *
Active power	$\pm 1.0\%$ *
Apparent power	$\pm 1.0\%$ *
Reactive power	$\pm 1.0\%$ *
Power factor	$\pm 1.0\%$ *
Active energy	Class 1*
Reactive energy	Class 1*

*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	$\leq 2,000$ m above mean sea level

Housing

Type	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) 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.

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