

Wallbox eM4 Single / Twin

Controller/Extender with charging socket
22 kW

The Wallbox eM4 Single / Twin is the future-proof and custom-fit charging solution for companies and private households, which is also recommended for use in the housing industry and in public charging parks and multi-storey car parks as a version that complies with calibration law. Up to two vehicles can be charged at the single or two Type 2 charging sockets from ABL. A connected charging cable can be permanently locked/unlocked via the app.

SIMPLE INSTALLATION AND OPERATION

The cable entry is designed flexibly so that installation can easily be carried out by one person in a short time. Configuration is quick and straightforward with the ABL Configuration app for Android and iOS, which is easy to use thanks to its intuitive user interface with visual and acoustic feedback.

TAILOR-MADE SOLUTION








The Wallbox eM4 Controller has an integrated communication and control unit. In group installations, additional charging points can be economically integrated via LAN or WLAN using the Extender variants of the eM4. Alternatively, both the Controller and the Extender variant can be operated independently. The static load management of a Controller/Extender group installation can optionally be enhanced with dynamic load management with the ABL Energy Meter accessory.

QUALITY AND SAFETY

The robust design and high-quality workmanship of the Wallbox eM4 protect it from external influences. The wallbox comes pre-installed and ready for connection thanks to the integrated Type A RCCB and DC residual current detection. All ABL wallboxes are made in Germany and comply with the highest safety standards.



FURTHER PRODUCT ADVANTAGES

-  Backend/OCPP connection (Controller) via LTE, LAN or WLAN
-  Group installations with up to 30 charge points, scalable to a charging cluster with up to 100 charge points
-  Standardised interfaces for integration into external systems via OCPP Smart Charging (Controller) or Modbus TCP
-  MID-compliant energy meters
-  Plug & Charge ready (ISO15118)
-  IP55 and IK10
-  Calibration law compliant charging (only variants compliant with calibration law)

GENERAL INFORMATION

| | |
|------------------------------|--|
| Model series | eM4 Single eM4 Twin |
| Commodity code | 85371091 |
| Packaging unit (PU) | 1 unit |
| Dimensions of packaging unit | Single: 600 × 400 × 252 mm Twin: 581 × 503 × 230 mm (H×W×D) |
| Packaging unit weight | Single: Approx. 10.7 kg Twin: Approx. 13 kg |
| Items supplied | Wallbox, printed safety instructions, printed instructions on “Calibration law compliant charging” (only variants compliant with calibration law), LTE stick (only Controller), 2 keys, installation kit |

INPUT / MAINS SUPPLY

| | |
|-----------------------|--|
| External power supply | Supply cable with cable cross-section up to a maximum of 10 mm ² or cable diameter ≤ 25 mm |
| Rated voltage | 230 / 400 V (3-phase) |
| Rated current | 32 A |
| Rated frequency | 50 Hz |
| Upstream fuse | 32 A, required on-site, C characteristic recommended (check national regulation for specific requirements) |
| Connection | Direct connection to the terminal block |

OUTPUT / VEHICLE CONNECTION

| | |
|--|---|
| Charging port in acc. with IEC 62196-2 | 1 or 2 lockable Type 2 charging sockets with shutter (depending on model) |
| Output voltage | 230 / 400 V |
| Max. charging current | 32 A |
| Maximum charging power (3-ph) | Single: 1 × 22 kW Twin: 2 × 11 kW or 1 × 22 kW* |
| Maximum charging power (1-ph) | Single: 1 × 7.4 kW Twin: 2 × 3.7 kW or 1 × 7.4 kW |

* See section **Operating conditions****PROTECTION / INTEGRATED COMPONENTS**

| | |
|----------------------------|--|
| RCCB | RCCB, type A, 30 mA (depending on model) |
| DC fault current detection | Electronic, $I_{\Delta n.d.c.} \geq 6$ mA |
| Energy meter | MID compliant |
| Load switching | Installation contactor, 4-pole, 40 A |
| Weld detection | No charging possible with welded contactors |
| Overcurrent protection | Integrated into firmware, disconnection at 120% after 10 seconds |
| Temperature monitoring | Internal, charging current reduction or shut down |

COMMUNICATION / INTERFACES

| | |
|-----------------------------------|---|
| Operating status indicator | LED |
| Access control | RFID, QR code or smartphone app |
| Communication EV | In acc. with IEC 61851-1 Mode 3 |
| Communication Controller/Extender | LAN, WLAN |
| Backend communication | LAN, WLAN, LTE (Controller only) |
| Protocols for external systems | OCPP 1.5 + 1.6, OCPP Smart Charging, Modbus TCP |
| External release contact | Potential-free contact in accordance with VDE-AR-N 4100 |

STANDARDS / DIRECTIVES

IEC 61851-1 | IEC 61851-21-2

2011/65/EU | 2014/53/EU

In acc. with MessEV Modul B (only variants that comply with the calibration law)

OPERATING CONDITIONS

| | |
|--------------------------------|---------------------------|
| Storage temperature | -30 to 75°C |
| Operating temperature* | -25 to 50°C |
| Relative humidity | 5 to 95%, no condensation |
| Class of protection | I |
| Overvoltage category | III |
| Degree of pollution | 3 |
| Degree of protection (housing) | IP55 |
| Impact strength | IK10 |
| Maximum elevation | ≤ 2,000 m AMSL |
| Power dissipation | Single: 5 W Twin: 8 W |

* eM4 Twin: with derating of power output depending on external temperature and conditions

HOUSING

| | |
|----------------------------|--|
| Type | Wall-mounted housing |
| Fixing type | Wall mounting using installation rail and installation kit |
| Material (housing / cover) | Plastic |
| Colour (housing / cover) | Black (similar to RAL 9011 / RAL 9017) |
| Locking mechanism | 1 or 2 integrated lever locks |
| Dimensions (H×W×D) | Single: 516 × 306.5 × 145 mm (W: 290 mm without protrusions) Twin: 516 × 428 × 145 mm (W: 395 mm without protrusions) |
| Weight (net) | Single: Approx. 7.2 kg Twin: Approx. 10.5 kg |

MODEL OVERVIEW

| | Product number | Calibration law compliance | Shutter | Manufacturer number | EAN number |
|-----------------------|----------------|----------------------------|---------|---------------------|---------------|
| eM4 Single Controller | 100000151 | No | No | 4WS-22CNS2 | 4011721191478 |
| | 100000152 | Yes | No | 4WS-22CES2 | 4011721191454 |
| | 100000153 | No | Yes | 4WS-22CNH2 | 4011721193212 |
| eM4 Single Extender | 100000157 | No | No | 4WS-22ENS2 | 4011721191485 |
| | 100000158 | Yes | No | 4WS-22EES2 | 4011721191461 |
| | 100000159 | No | Yes | 4WS-22ENH2 | 4011721193250 |
| eM4 Twin Controller | 100000002 | No | No | 4WT-22CNS2 | 4011721187396 |
| | 100000019 | Yes | No | 4WT-22CES2 | 4011721189772 |
| | 100000023 | No | Yes | 4WT-22CNH2 | 4011721189819 |
| eM4 Twin Extender | 100000004 | No | No | 4WT-22ENS2 | 4011721187419 |
| | 100000020 | Yes | No | 4WT-22EES2 | 4011721189789 |
| | 100000024 | No | Yes | 4WT-22ENH2 | 4011721189826 |

OPTIONAL ACCESSORIES

eM4 Single



POLEM4 Single mounting pole*
100000361



POLE Slim mounting pole for one eM4 Single*
100000245



POLE Slim mounting pole for two eM4 Single*
100000246



Weather protection roof
WPR12

eM4 Twin



POLEM4 Twin mounting pole*
100000192



POLE Slim mounting pole for one eM4 Twin*
100000191



POLE Slim mounting pole for two eM4 Twin*
100000237



Weather protection roof
WPR36

* Charging station available separately

eM4 Single | eM4 Twin



Cable storage holder with charging plug adapter
CABHOLD



ABL Energy Meter
100000193



Individual lock (different locking circuits)
100000214, [...], 100000230



Type 2 charging cable (various cable lengths)
CC2010, [...], CC3275

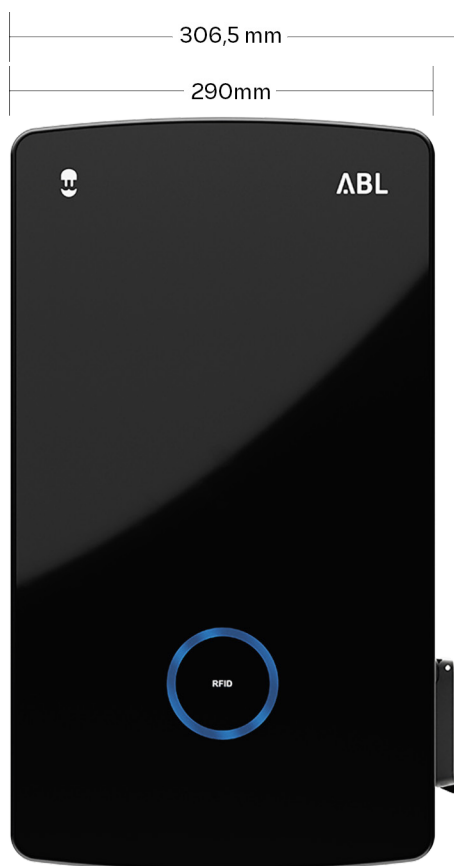


Type 2 to Type 1 adapter cable
LAKK2K1



RFID-Keyfob
100000253

PRODUCT DIMENSIONS



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