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Wallbox eM4 Single
Controller+ with charging socket
22 kW

The calibration law compliant Wallbox eM4 Single is the future-proof and custom-fit charging solution for companies, the housing industry, car parks and private households. One vehicle can be charged at its ABL Type 2 charging socket. The connected charging cable can be permanently locked/unlocked via the app.

Simple installation and operation

The cable entry is designed flexibly. The wallbox can be installed quickly and easily by just one person. The ABL Configuration App for Android and iOS makes configuration quick and straightforward. The intuitive user interface of the Wallbox eM4 Single ensures simple operation thanks to visual and acoustic feedback.

Tailor-made solution

The Wallbox eM4 Single is available as a Controller variant with integrated communication and control unit. The Extender variant makes it possible to cost-effectively add additional charge points via LAN or WLAN to form a group installation. 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 Single protect it from external influences. The wallbox comes pre-installed and ready for connection thanks to an integrated Type A RCCB and DC residual current detection. All ABL wallboxes are made in Germany and comply with the highest safety standards.

Product number 100000453

Further product advantages

	Backend/OCPP connection 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 or Modbus TCP
	MID-compliant energy meter
	Calibration law compliant charging
	Plug & Charge ready (ISO15118)
	IP55 and IK10

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Wall Box Chargers S.L.U. · Carrer del Foc, 68 · 08038 Barcelona · Spain · www.wallbox.com

Page 1 of 4

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General information

Model	eM4 Single
Product number	100000453
EAN number	4011721194165
Commodity code	85371091
Packaging unit (PU)	1 unit
Packaging (dimensions H×W×D)	600 × 400 × 252 mm
Weight of packaging unit	Approx. 10.7 kg
Items supplied	Wallbox, printed operating manual, printed instructions on "Calibration law compliant charging", LTE stick, 2 keys, installation kit

Input / mains supply

External power supply	Supply cables with a conductor cross-section up to a maximum of 10 mm² or cable diameters ≤ 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
Connection	Direct connection to the terminal block

Output / vehicle connection

Connection system	Lockable Type 2 charging socket in acc. with IEC 62196-2
Output voltage	230 / 400 V
Max. charging current	32 A
Maximum charging power (3-phase)	1 × 22 kW
Maximum charging power (1-phase)	1 × 7.4 kW

Protection / integrated components

RCCB	RCCB, type A, 30 mA
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

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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
Supported protocols for external systems	OCPP 1.5 + 1.6, OCPP Smart Charging, Modbus TCP
Load shedding / external release contact	Potential-free contact in accordance with VDE-AR-N 4100

Standards / directives

IEC 61851-1 | IEC 61851-21-2 | IEC 60364-7-722 Ed. 1 | IEC 62955
2014/30/EU | 2011/65/EU | 2012/19/EU | 2014/35/EU | 2014/53/EU
In acc. with MessEV Modul B
VDE-AR-N 4100

Operating conditions

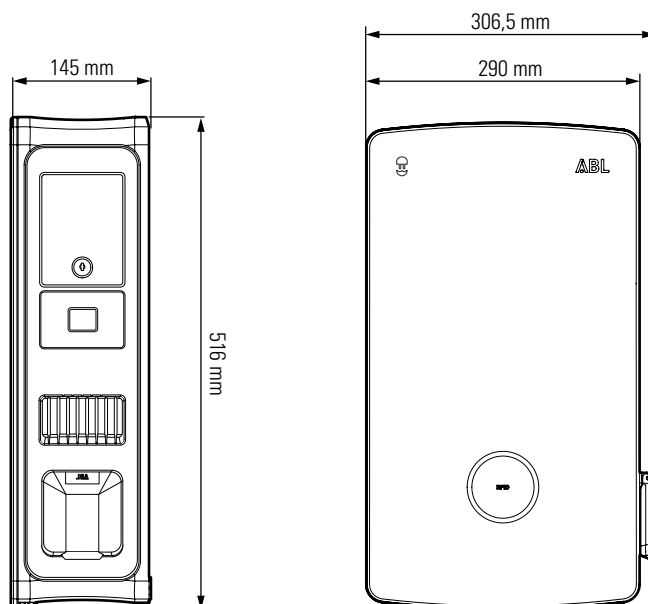|	
Storage temperature	-25 to 75°C
Operating temperature	-25 to 40°C
Relative humidity	5 to 95%, no condensation
Class of protection	I
Overvoltage category	III
Degree of pollution	3
Degree of protection (housing)	IP55
Impact strength	IK10
Maximum elevation	≤ 2,000 m AMSL
Power dissipation	5 W

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	Integrated lever lock
Dimensions (H×W×D)	516 × 306.5 × 145 mm (W: 290 mm without protrusions)
Weight (net)	Approx. 7.2 kg

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Optional accessories

POLEM4 Single mounting pole	100000361
POLE Slim mounting pole for a Wallbox eM4 Single	100000245
POLE Slim mounting pole for two Wallboxes eM4 Single	100000246
ABL Energy Meter	100000193
Weather protection roof	WPR12
Cable storage holder with charging plug adapter	CABHOLD
Individual lock (different locking circuits)	100000214, [...], 100000230

Dimensioned drawing

145 mm

516 mm

306,5 mm

290 mm

ABL