

# WALLBOX 1M AC



## TYPE

EV Wallbox 1M AC Electric Vehicle Charging Stations.

## MODELS / DESIGNATIONS

EV Wallbox 1M AC/A0,AS,AM.

## APPLICATION

Internal and external parking lots, commercial buildings, apartment buildings, private garages, home parking lots, industrial facilities.

## DESCRIPTION

EV Wallbox 1M AC is a small-sized, wall-mounted or floor-standing indoor/outdoor station equipped with a socket or plug with a straight or spiral cable up to 4.8 m long.

## HOUSING DESIGN

- ▶ steel (standard) in protection class I (standard) or II;
- ▶ aluminum in I (standard) or II protection class;
- ▶ any color on the case;
- ▶ the front of the station made of high-strength synthetic plate with a thickness of 5-6 mm, covered with foil or screen printing (any graphic);
- ▶ universal distance between holes on the back enables quick and easy mounting on a wall or post.

## POWER

- ▶ lower; upper; rear;
- ▶ station connection terminals up to 10 mm<sup>2</sup>.

## AVAILABLE CHARGING CAPACITY

- ▶ 3,7 kW; 7,4 kW; 11 kW; 18 kW; 22 kW.
- ▶ AC charging.

## CHARGING POINT CONNECTIONS

- ▶ max. 1 charging point;
- ▶ AC socket type-2 with flip;
- ▶ type-2 or type-1 plug;
- ▶ automatic locking of the plug in the socket\*\*
- ▶ charging cable length up to 4.8 m: spiral or straight cable.

## RELEVANT FEATURES

- ▶ type 2 socket with clamshell;
- ▶ type 2 or type 1 plug;
- ▶ straight or spiral cable;
- ▶ RCD type A or B residual current protection;

- ▶ type B overcurrent protection;
- ▶ 4P-contactor;
- ▶ EVSE charging process controller;
- ▶ energy meter;
- ▶ ModBUS MID energy meter;
- ▶ overvoltage protection of type 2;
- ▶ communication modem;
- ▶ 7 inch screen.

## ADDITIONAL EQUIPMENT

- ▶ free-standing post, code: FA 10045503;
- ▶ concrete slab, code: FP1004501;
- ▶ wall barrier, code: SO00BO2002;
- ▶ parking separator 1,6 m, code: SP00BO1003;
- ▶ type 2 surge arrester, code: AP OP TYPE2;
- ▶ RFID card reader+5 cards, code: RFID19;
- ▶ RFID card reader for operator card\*\*, code: RFID 1015;
- ▶ power cord 2 m with connector 16/32A 3P + N + PE, code: PZ 1632;
- ▶ thermostat with heater 15W, code: TG 15W;
- ▶ wall bracket for cable wrapping, code: UPK 15;
- ▶ plug-in type1 instead of type2, code: WTyp1;
- ▶ additional warranty 12 months.

## CHARGING SIGNALLING \*

- ▶ LEDs (RGB) showing the various stages of charging;

## CHARGING

- ▶ plug&charge;
- ▶ key;
- ▶ RFID card/PIN code;
- ▶ remote control;
- ▶ mobile/operator app\*\*

## COMMUNICATION

- ▶ LAN / GPRS / 3G / 4G-modem;
- ▶ OCPP 1.6 J-SON-protocol (modem, central communication controller);
- ▶ SIM card on the operator's side;
- ▶ mobile application, station management system – separate offer;
- ▶ the station has access by providing API\*\*

## THE STATION'S PACKAGING

- ▶ unit box.

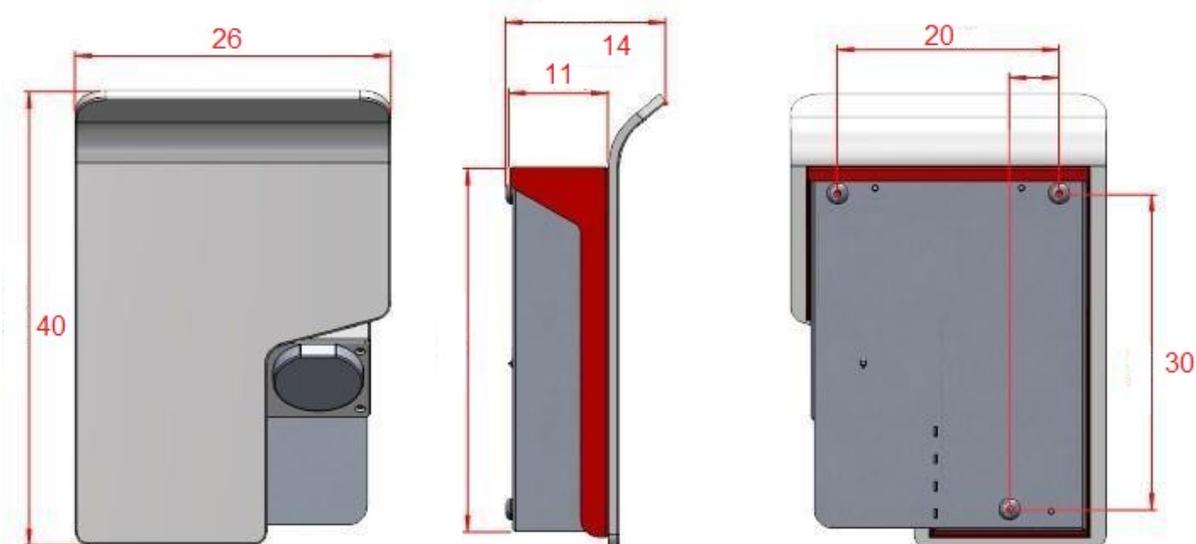
\* Equipment selected depending on station version.

\*\* For public stations/with management system.

## TECHNICAL PARAMETERS OF THE CHARGING POINTS

Type of socket	<b>Type-2</b>
Type of plug	<b>Type-2, type-1</b>
Length of the charging cable [m]	<b>4,8</b>
Voltage [V]	<b>230/400</b>
Rated charging point current [A] AC	<b>up to 32</b>
Rated power of the charging point [kW] AC	<b>up to 22</b>
Rated power of the station [kW] AC	<b>up to 22</b>

## TECHNICAL DRAWING



## POWER SUPPLY SPECIFICATIONS

Cross section of supply cable [mm <sup>2</sup> ]	<b>up to 10</b>
Type of power supply	<b>1xL+N+PE / 3xL+N+PE</b>
Network layout	<b>TN-S, TNC-S, TT</b>
Rated switching voltage [V] (+/- 10%)	<b>230/400</b>
Rated insulation voltage [V]	<b>500/690</b>
Rated frequency [Hz]	<b>50/60</b>
Withstand surge voltage [kV].	<b>8</b>
Rated connection power [kW]	<b>22</b>
Rated connection current [A]	<b>32</b>
Overvoltage protection	<b>Type 2</b>

## STANDARDS

PN-SV-61851-1_2011E	Electric vehicle conductive charging system -- Part 1: General requirements
PN-SV-61851-22:2002	Electric vehicle conductive charging system - Part 22: AC electric vehicle charging station
PN-EN 61439-1:2011	Low-voltage substations and control gear - Part 1: General rules
PN-EN 61439-3:2012	Low-voltage substations and control gear -- Part 3: Distribution board stations intended for use by persons other than the public (DBO)
PN-EN 61439-5:2015-02	Low-voltage substations and control gear -- Part 5: Sets for power distribution in public networks
PN-EN 50274:2004	Low-voltage substations and control stations -- Protection against electric shock -- Protection against unintentional direct contact with hazardous live parts
PN-EN 62208:2006	Empty enclosures for low-voltage substations and control rooms -- General requirements
PN-E 05163	Shielded low-voltage substations and switchgear -- Test guidelines for arc-discharge conditions resulting from internal short circuits
PN-EN 60695-11-10:2014-02	Fire hazard testing - Part 11-10: Test flames - 50 W flame test methods for horizontal and vertical specimen alignment
EN ISO 14040:2009	Environmental management -- Life cycle assessment -- Principles and structure
PN-EN ISO 14044:2009	Environmental management -- Life cycle assessment -- Requirements and guidelines
PN-EN 62196-1:2015-05	Plugs, socket-outlets, vehicle couplers and vehicle inlets -- Conductive charging of electric vehicles -- Part 1: General requirements
PN-EN 62196-2:2017-06	Plugs, socket-outlets, vehicle couplers and vehicle inlets -- Conductive charging of electric vehicles -- Part 2: Dimensional compatibility and interchangeability requirements for a.c. plug and socket contact products
PN-EN 62196-3:2015-02	Plugs, socket-outlets, vehicle connectors and vehicle inlets -- Conductive charging of electric vehicles -- Part 3: Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. vehicle connectors with sleeve-and-pin contacts
ISO/IEC 14443	Identification cards - Proximity chips - Proximity cards
ISO/IEC 15693	Identification cards - Proximity chips - Proximity cards
EN 61000-6	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments

## TECHNICAL SPECIFICATIONS OF THE HOUSING

Dimension (H/W/D)(+/-5mm) [mm]	<b>500/345/166</b>
Material	<b>Steel, aluminum</b>
Protection class	<b>I/ II</b>
IP/IK protection class	<b>54/10</b>
Weight [kg]	<b>3-16</b>
Operating temperature [st. C]	<b>-30 up to +55</b>
Moisture content [%]	<b>95</b>
Noise Level [dB]	<b>&lt;10</b>
Installation	<b>Wall mounted; on pole</b>

