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**EV3**

# POWER DC

40 - 160kW





## TYPE

EVB Power DC Electric Car Charging Stations

## MODEL / DESIGNATIONS

PWR40-C2	without the possibility of extension by another kW - the possibility of replacing the CHAdeMO connector
PWR60-C2	possibility of expansion up to 80 kW - possibility of replacing the CHAdeMO connector
PWR60-C2-C2	without the possibility of extension by another kW - the possibility of replacing the CHAdeMO connector
PWR60-C2-C2-U	possibility of expansion up to 80 kW - possibility of replacing the CHAdeMO connector
PWR80-C2	without the possibility of extension by another kW
PWR80-C2-C2	without the possibility of extension by another kW - the possibility of replacing the CHAdeMO connector
PWR80-C2-C2-U	possibility of expansion up to 160 kW - possibility of replacing the CHAdeMO connector
PWR120-C2	expandable up to 160 kW
PWR120-C2-C2	without the possibility of extension by another kW - the possibility of replacing the CHAdeMO connector
PWR120-C2-C2-U	possibility of expansion up to 160 kW - possibility of replacing the CHAdeMO connector
PWR160-C2	expandable up to 240 kW
PWR160-C2-C2	no extension possible
PWR160-C2-C2-U	expandable up to 240 kW

## ADDITIONAL EQUIPMENT

TKP - payment card terminal

ZWM4080 - Power increase from 40 to 80 kW

ZWM6080 - Power increase from 60 to 80 kW

ZWM60120 - Power increase from 60 to 120 kW

ZWM80160 - Power increase from 80 to 160 kW

ZWM120160 - Power increase from 120 to 160 kW

ZWM160240 - Power increase from 160 to 240 kW

WDC - movable boom to support charging cables

CCSCHA7M - extension of the CSS-2 cable up to 7 meters

LED2MFRON - LED front windshield illumination - logo/lettering

FB12080108 - concrete base plate 1200x800x10

SLPI8070000 - protective barrier 800x70 wall mounting

SLPI1207000 - protective barrier 1200x70 mounted to the ground

SEKR901510 - black parking separator with reflectors 900x150x100

SEDL161412 - black parking separator with reflectors 1670x145x120

GD12M - additional warranty for the next 12 months

## APPLICATION

Free-standing DC and optionally AC fast charging station. Designed for charging cars with high battery capacity in public and industrial areas.

## DESCRIPTION

### HOUSING DESIGN:

- ▶ Powder-coated aluminium housing;
- ▶ front made of toughened glass;
- ▶ free-standing;

Free branding and colouring based on individual design.

### CONNECTORS AVAILABLE:

- ▶ CCS plug 2 (C2), with cable (Combo-2) Combo T2 with straight cable up to 3.5m;
- ▶ CHAdeMO (CH)plug with straight cable from 3.5 m;
- ▶ plug type2 (ACTYP2) with straight cable up to 4.8m
- ▶ Type2 socket (ACTYP2G) with locking device.

### AVAILABLE POINT CHARGING CAPACITIES:

- ▶ DC: 40/60/80/120/160,
- ▶ AC: do 22 kW.

Two or three vehicles simultaneously with dynamic power sharing.

### RELEVANT FEATURES:

- ▶ main switch - fuse switch;
- ▶ overvoltage protection;
- ▶ overcurrent protection;
- ▶ residual current protection;
- ▶ emergency shutdown switch;
- ▶ insulation condition control;
- ▶ harmonic filter;
- ▶ energy consumption meter at each workstation;
- ▶ thermostat + 15 W heater - adaptive set for external conditions;
- ▶ forced ventilation system.

### CHARGING SIGNALLING:

- ▶ LEDs (RGB) showing the various stages of charging;
- ▶ HD display - 10 inches - charging process parameters.

### INTERFACE:

- ▶ buttons;
- ▶ LCD graphic display;
- ▶ RFID card reader in 13.56 MHz standard;
- ▶ payment terminal.

### COMMUNICATION PROTOCOL:

- ▶ OCPP 1.6J, OCPP 2.0.

### COMMUNICATION:

- ▶ Ethernet;
- ▶ WiFi;
- ▶ GMS, 3G, LTE.

## STANDARDS

EN-61851-1:2011E	Electric vehicle conductive charging system – Part 1: General requirements
EN-61851-22:2002	Electric vehicle conductive charging system - Part 22: AC electric vehicle charging station
EN 61439-1:2011	Low-voltage substations and control gear - Part 1: General rules
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)
EN 61439-5:2015-02	Low-voltage substations and control gear – Part 5: Sets for power distribution in public networks
EN 50274:2004	Low-voltage substations and control stations – Protection against electric shock – Protection against unintentional direct contact with hazardous live parts
EN 62208:2006	Empty enclosures for low-voltage substations and control rooms – General requirements
E 05163	Shielded low-voltage substations and switchgear – Test guidelines for arc-discharge conditions resulting from internal short circuits
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
EN ISO 14044:2009	Environmental management – Life cycle assessment – Requirements and guidelines
EN 62196-1:2015-05	Plugs, socket-outlets, vehicle couplers and vehicle inlets – Conductive charging of electric vehicles – Part 1: General requirements
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
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 PARAMETERS OF THE CHARGING POINTS

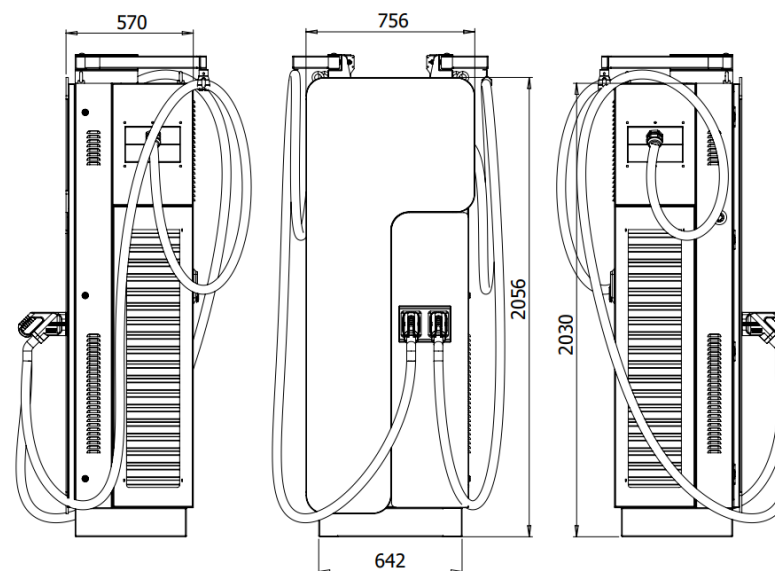
Plug type	CCS-2, CHAdeMO, type-2
Maximum charging current [A]	DC: 32 - 250, AC: 32-63
Output voltage range	150-1000 VDC, 230/400 VAC
Charging standard	Mode 4, ChAdeMO2, Type 2, IEC 61851, IEC61851-23, IEC 61851-24, ISO 15118, DIN 70121, IEC 61851-1, IEC 62196-2
Communication standard	ISO 15118, DIN 70121, CHAdeMO 1.1
Charging cable length [m]	Up to 4.8
Power factor	0,98
Coupling efficiency (%)	up to 96
Communication protocol	OCCP 1.6J ( 2.0 ready)
Charging station parameters	Firmware upgrade
Communication	LTE, GSM, ETHERNET, WIFI
Interface	10-inch TFT screen
Platność	Payment card terminal

## TECHNICAL SPECIFICATIONS OF THE HOUSING

Dimension (H/W/D) [mm].	2055/756/570
Material	Aluminium, toughened glass
Colours	Any RAL
Protection class	I/II
Protection class IP/IK	54/10
Weight [kg]	60-120
Operating temperature [st.C]	-30 to +55
Moisture content [%]	95
Noise level [dB]	<60
Installation	4xM12

## POWER SUPPLY SPECIFICATIONS

Cross section of supply cable [mm <sup>2</sup> ]	50-300 mm <sup>2</sup>
Type of power supply	3xL+N+PE
Network layout	TN-S, TNC-S, TT
Rated switching voltage [V] (+/- 10%)	400
Rated insulation voltage [V]	500/690
Rated frequency [Hz]	50/60
Withstand surge voltage [kV].	8
Rated connection power [kW]	52 - 350
Rated connection current [A]	100- 600
Overvoltage protection	type 2





## **CONTACT**

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