

# EN90K2

## FAST EV CHARGING STATION 90kW

### Product information:



EN90K2 charging station is used for fast charging of electric vehicles. The product features high efficiency, power and reliability, as well as harsh environment resistance. It complies with global electric vehicle charging standards. The maximum DC charging power is 90kW. However, 120kW, 150kW or 180kW configurations are possible. The maximum charging current reaches 300A. The unit is three-phase powered, with an available output voltage range of 150V to 1000V.

### Functionalities:

- Support for CCS-2, CHAdeMO, AC Type 2 or output support
- OCPP 1.6J support with SW do 2.0 update, intelligent charging and battery management support
- The possibility of charging two vehicles simultaneously – joint reached power is 90 kW
- User friendly interface with a 7" LCD display with a touch screen with tempered glass
- LAN and LTE support
- RFID and cashless payment support
- High IP55 tightness of the device, resistance to aggressive environment influence
- Plenty charging modes: automatic, full, temporary, partial, relative to the amount of energy, to specific SoC
- Power switch between two DC connectors
- Functions for high safety of use: EPO, SPD, RCP, insulation condition monitoring
- Internal AC, DC meter

### Basic parameters:

- DC output power 90kW
- AC output power 22kW
- Maximum system efficiency  $\geq 95\%$

### Safety:

- Compliance with CE, EN 61851-1-2001; EN 61851-21-2001; EN 61851-22-2001
- Compliance with EN61000-6-3 and EN61000-6-1 Class A

### Application:

- Bus depots
- Workplaces
- Gas stations
- Parking lots

## Specifications:

	Parameter	Unit	Value
<b>Output – basic parameters</b>	DC output power (max)	kW	90
	AC output power	kVA	22
	AC output current	A	32
	DC output voltage range	V	150 – 1000
	Maximum output current	A	600A@300V/ 360A@500V/ 180A@1000V
	Current limit	A	250A/CCS (optional 300A) – 125A/CHAdEMO
	Accuracy of voltage stabilization	%	≤±0,5
	Accuracy of current stabilization	%	≤±3
<b>AC input – basic parameters</b>	Input voltage	VAC	260 – 530 (3 phases + N + PE)
	Frequency range	Hz	45 – 65
	THD	%	≤5%
	Power factor	-	≥0.99
<b>Environmental conditions</b>	Operation temperature	°C	-20 - 70 (limited to 50)
	Storage temperature	°C	- 40 - 75
	Humidity	%	0 – 95
	Height	m ABSL	<2000
<b>Mechanical parameters</b>	Dimensions H x W x L	mm	700 x 1750 x 750
	Mass	kg	400+63
	Protection level		IP55/K10
	Installation of the charger		On the fundament

	Technical data	Description
<b>Features and interface</b>	HMI	Touchscreen display LCD 7", Service LAN, RFID and LTE, LED panel, possibility to install POS machine
	Energy consumption measurement	Licznik prądu AC, Licznik prądu DC, DL/T 5137-2008 standard
	Control protocol	10M/100M LAN oraz standard sieci LTE, OCPP 1.6J
	Security	RCD-B (opcjonalnie), E-stop, różnicowoprądowe AC
	Charging and billing modes	Automatyczne pełne ładowanie, ładowanie czasowe, ładowanie częściowe, ładowanie określonej ilości energii, ładowanie do określonego SOC
	DC charging for two vehicles	Each DC output can be controlled by priority (full charging power/half charging power/no charging)
	Charging protection	Over-current protection, short-circuit protection, over-voltage protection, under-voltage protection, insulation monitoring, ground monitoring, common ground protection for the output of two charging plugs, reverse polarity battery protection, overheat protection
<b>Standard</b>	CSS PLC communication	DIN70121, ISO15118
	CHAdEMO	CHAdEMO V1.2
	Safety	Zgodność z CE, EN 61851-1/EN 61851-23/EN 61851-24
	EMC	UL2202, CE, EN61000-6-3/EN61000-6-1 class A

\* the manufacturer reserves the right to change the appearance and parameters of the product