

power your future



# Charging station for electric vehicles type EV-C

180 kW | 240 kW | 300 kW

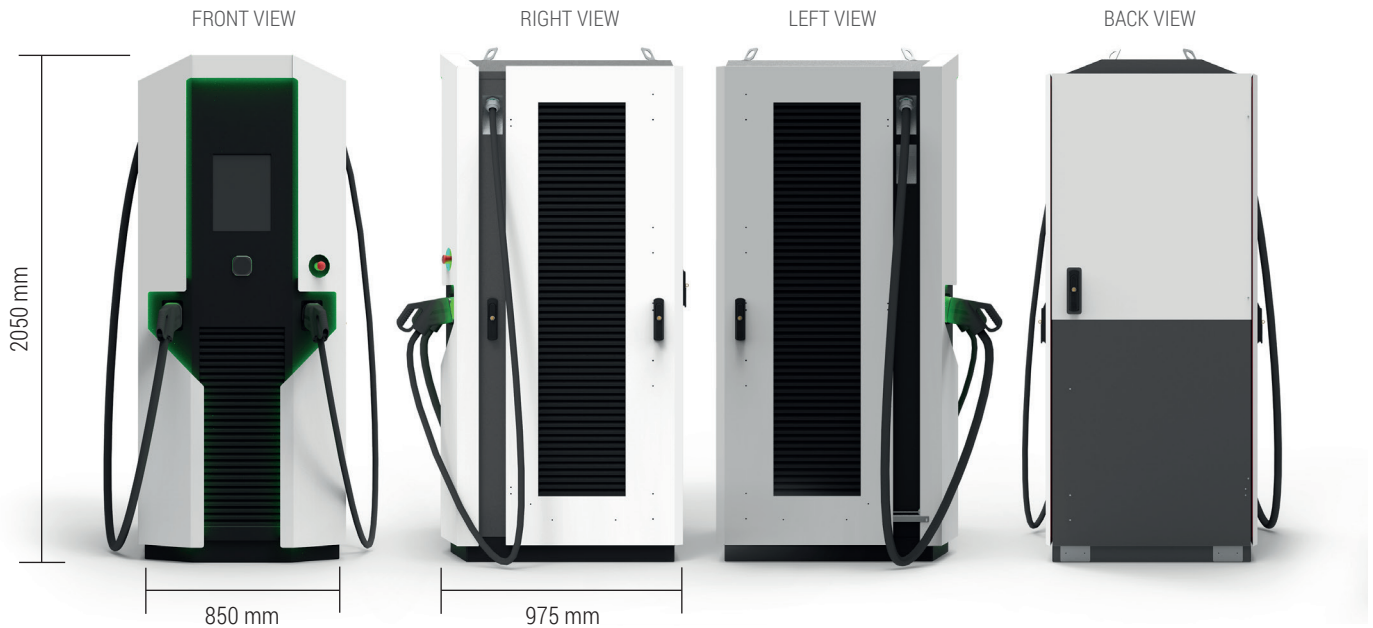


The EV-C300 type electric vehicle charging station enables charging of electric vehicles with a direct current (DC) power of up to 300 kW through CCS Type 2 connectors. The device is powered by three-phase alternating current (AC) with a voltage of 400 V and a frequency of 50 Hz in a TN system with a maximum connection power of 330 kVA. The housing is made of powder-coated stainless steel with an IP54 protection rating and IK10 mechanical resistance class. The efficiency of the system under rated charging parameters is greater than 95%, and the content of higher harmonics in the current is less than 5%. The charging station is resistant to weather conditions. The authorization of the charging process is done through an RFID reader, optionally with a PIN code or through an external application. The charging station supports OCPP 1.6 communication protocol and comes equipped with a GSM modem as a standard feature. It can be operated via a touch screen display or optionally through an application.

## Main components of the charging station:

- Powder-coated stainless steel housing,
- Charging cables with CCS Type 2 connectors,
- Simultaneously supported electric vehicles - two,
- 15-inch touch screen display for charging control,
- LCD multimedia screen for displaying advertising content (optional),
- LED illumination,
- RFID card reader,
- AC/DC power converters - up to 10 units,
- Programmable DC charging controller,
- Integration with Elocity or other software through OCPP 1.6 (optional),
- GSM/4G LTE cellular network modem,
- Wireless OTA ("Over-The-Air"),
- 2 channels of cellular network communication, one for service support and the other for operator backend communication,
- MID-compliant electric energy meter,
- Emergency switch on the housing,
- Electrical devices (circuit breakers, contactors, overcurrent and differential protections, surge protectors, insulation status relays).

# Electric vehicle DC charging stations:



		EV-C180	EV-C240 <sup>1)</sup>	EV-C300	
AC POWER SUPPLY	Voltage U <sub>ac</sub>	3 x 400 V / 50 Hz			
	Maximum current drawn from the grid at 3 x 400V	286 A	381 A	477 A	
	Rated current / characteristics of the fuse insert	3 x 300 A gG	3 x 400 A gG	3 x 500 A gG	
	Connection power	198 kVA	264 kVA	330 kVA	
	Power Distribution System	TN-S, TN-C-S, TN-C <sup>2)</sup>			
DC FAST CHARGING	Nominal power	180 kW	240 kW	300 kW	
	U <sub>dc</sub> voltage	150 ÷ 1000 VDC			
	Number of connectors / type	2 / CCS typ 2			
	Maximum current on the charging connector	Connector 1	250A (up to 500A in Boost Mode) / 500 A - liquid-cooled (optional)		
		Connector 2	250A (up to 500A in Boost Mode)		
	Power distribution between connectors	Connector 1	180 kW	240 kW	300 kW
		Connector 2	90 kW	120 kW	150 kW
Charging cable length	4,2 m <sup>±5%3)</sup>				
GENERAL CHARACTERISTICS	Efficiency	≥95% (für Ausgangsleistung >50%)			
	THDi	≤5%			
	Power factor (at full load)	≥0,99			
	Charging system	Mode 4			
	Communication protocol	OCPP 1.6			
	Charging authorization	RFID-Karte / PIN <sup>4)</sup> / Anwendung <sup>4)</sup>			
	Display	TFT 15", Touchscreen			
	Protection rating	IP54 / IK10			
	External dimensions	850mm x 975mm x 2050mm			
	Weight	~700 kg	~780 kg	~860 kg	
	Operating temperature range	von -25°C bis +50°C (> +40°C mögliche Leistungsbeschränkung)			
	Standards and regulations	CE, LVD 2014/35/UE, EMC 2014/30/UE, PN EN IEC 61851 1, PN-EN 61851 23, PN EN 61851 24, PN EN 62196-1, PN EN 62196 3:2015-02, DIN SPEC 70121			

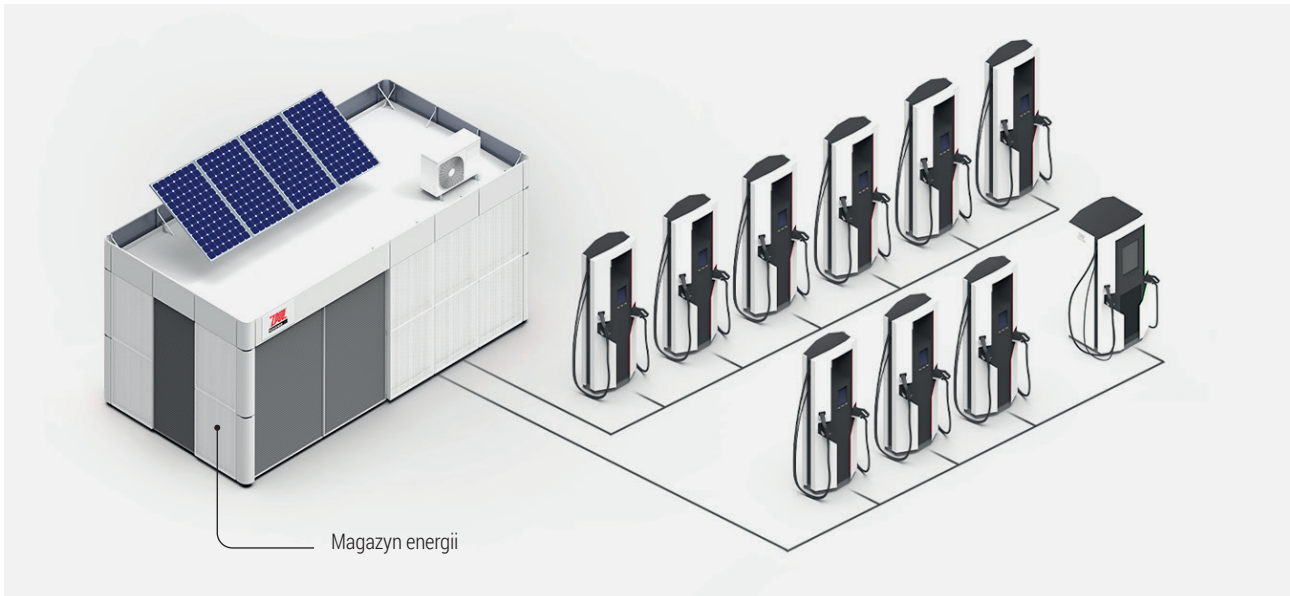
<sup>1)</sup> – Possible construction of EV-C210 and EV-C270 charging stations after consultation with the manufacturer

<sup>2)</sup> – A different network layout can be accomplished after consultation with the manufacturer

<sup>3)</sup> – Standard charging cable length is 4.2m±5%, different length available on request after consultation with the manufacturer

<sup>4)</sup> – Option

## HUB - Electric Vehicle Charging Center



## Main advantages of the HUB

- Prevention of significant load fluctuations during electric vehicle charging,
- Storage of electricity from the distribution grid (e.g., less expensive night tariff) or RES so that it can be used at times when no electricity is generated,
- Security and continuity of supply,
- Optimisation of supply infrastructure, possibility of installing more charging stations,
- Power factor adjustment,
- Lower contracted capacity, reduced demand for electricity from the power grid.

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