

Ultra Fast Charge Station



Overview

- Charge any compatible vehicle with CCS standard
- Output voltage up to 920 V
- Different power levels available (160 or 320 kW)
- Combo DC output (Mode-4) / Option CHAdeMO
- TFT color display
- Network integration (OCPP or proprietary protocol)
- Built-in communications (3G; LAN; Wi-Fi)

Available Models

HV160 HV175 HV350

DC plug-in charging system



Product description

Focused on bringing new and innovative solutions to the EV charging market characterized by a growing trend for fast high-power chargers, Efacec developed a new and innovative solution that fits all features of this emerging market. The HV175 is a High Power Ultra Fast charging solution, able to supply up to 320 kW by connecting two HV175 units to a user interface unit with adequate cable and connector. Connecting more HV175 units to a mechanical connection allows higher currents as can be used by some heavy vehicles.

Using Efacec's more than 30 years of experience in power electronics technology, the HV175 is the most powerful charging system, safe, robust, durable, stable and environmentally friendly.

Main features

- Fits all CCS vehicles
- Customizable
- Mode-4 charging
- HV350 = 2 x HV175
- Liquid cooled cable
- Indoor/Outdoor (IP54)

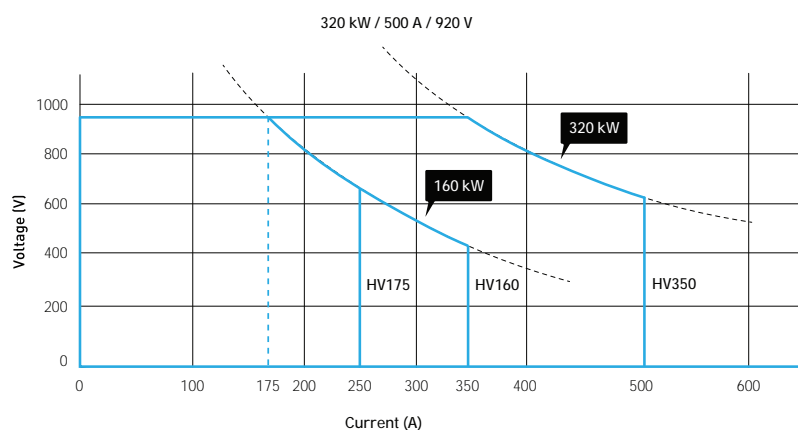
Applications

- Long-range EVs charging spots

Technical Information

Technical data		HV160	HV175	HV350
Nominal Input				
Phases / lines		3 phases + neutral + PE		
Voltage		400 Vac ± 10 %		
Frequency		50 Hz		
Power Factor		0,98		
Nominal input current & power		248 A @ 172 kVA	248 A @ 172 kVA	2 x (248 A @ 172 kVA)
Efficiency		> 95 % @ full power		
DC Output				
Maximum Voltage		920 V		
Maximum current		175 A 350 A up to 457 V	175 A 250 A up to 640 V	350 A 500 A up to 640 V
Nominal Power (@920V)		161 kW	161 kW	322 kW
General Specifications				
Communication with EV		IEC61851-23 PLC (CCS / Combo-2)		
DC Plug		Combo T2 (CCS / Combo-2)	Combo T2 (CCS / Combo-2)	Combo T2 (CCS / Combo-2)
Human machine Interface		By default		
Display		15.6” TFT Color screen		
RFID system (optional)		Mifare (Classic, DesFire EV1) or others upon request		
Communication		3G (GSM or CDMA) LAN Wi-Fi		
Communication Protocols		OCPP1.5. Others under request		
Place of installation		Indoor/Outdoor		
Altitude		Up to 1000 m		
Protection degree		IP54 IK10		
Operating temperature/optional cold option		-25 to +50 °C / -35 °C to +50 °C		
Storage temperature		-40 to +60 °C		
Humidity		5% to 95%		
Sound noise		<55 dB in all directions		
Dimensions (W x D x H)		1000 x 800 x 1800 mm + User Interface Unit (for current greater than 200 A)	1000 x 800 x 1800 mm + User Interface Unit (for current greater than 200 A)	2 x (1000 x 800 x 1800 mm) + User interface unit
Weight		1100 kg + user interface unit	1100 kg + user interface unit	2 x (1100 kg) + User interface unit
User Interface Unit				
Dimensions (W x D x H)		600 x 300 x 2400mm		
Weight		260 Kg		
Charging cable length		Inside: 3.68 m / Outside: 2.32m		

Output Characteristics



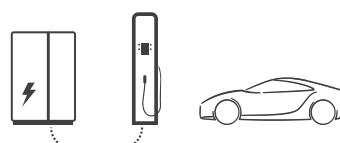
Output Configurations

Scenario 1



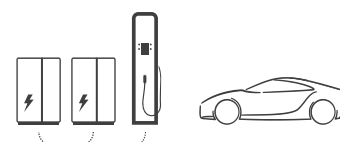
Direct connection of the HV175 cable to the electric vehicle limited to 175 A due to the cable.

Scenario 2



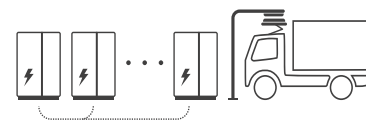
One HV160 unit connected to an user interface unit

Scenario 3



Two HV175 units, with a total output current of 350 A connected to an user interface unit equipped with a 350 A changing cable

Scenario 4



Two or more HV175 units connected to a mechanical connection device.



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