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

CCS

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 tp 320 kW by connecting two **HV175** units to an 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

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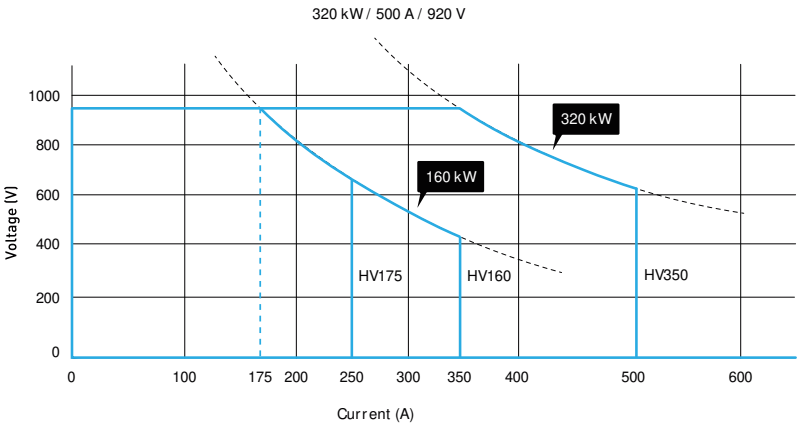
Technical Information

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 ºC / -35 ºC to +50 ºC	
Storage temperature		-40 to +60 ºC	
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

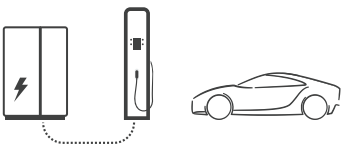


Output Configurations

Scenario 1

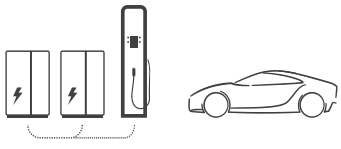
Direct connection of the **HV175** cable to the electric vehicle limited to 175 A due to the cable.

Scenario 2



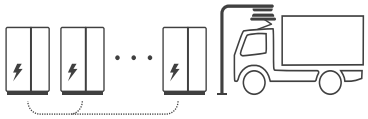
One **HV160** unit connected to an user interface unit

Scenario 3



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

Scenario 4



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

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