ambi CHARGE

11 kW DC-Wallbox

V2G
VEHICLE TO GRID

CCS

DC

05.2023

Specifications

Version:	DC-Wallbox
Max. power:	11 kW
AC Input Voltage level:	3 Phases, 400V AC (Europe)
AC Input voltage tolerance:	+- 10% (Static)
Power factor:	>= 99%
Total Harmonic Distortion (THD):	<= 5%
DC Output voltage:	120 – 500V DC
DC Output Current:	30A
DC Output Current ripple:	<+-3% max. current
AC/DC Topology:	Active 3 Ph PFC, bidirectional
DC/DC Topology:	Isolated, bidirectional DC/DC Converter
Input Voltage stage:	Phase management and DC input
Safety and Protection:	Galvanic isolation (Basic isolation Input to Output) Rapid discharge DC Output Over current monitoring Reverse polarity protection DC Output Fuses Temperature monitoring Isolation monitoring Self-test
Lifetime:	10+ years
Standby operation time:	100.000 hours
Active operation time:	>21.000 hours (according OEM standard use case)
Charge controller:	integrated
Communication to car:	CCS, PLC, PWM, Control Pilot, Proximity Pin
Diagnose:	Remote, OCCP
to Backend/CPO:	OCPP2.0, HTTPS (Websockets etc.)*, MQTT* to EMS OCPP, Modbus TCP*, RS485/RS232, Smart Home protocols*
Data interfaces:	Ethernet (LAN)
Weight:	<25kg
Dimensions:	< 583mm x 346mm x 195mm
Operating temperature:	-25 to +50°C
Humidity:	Up to 95 %
Operation height:	2000m over sea level
Cooling concept:	active (air cooling, fans)
Noise:	@1m, full load, <25 dB (A) @ <40 °C
IP Class:	IP54 enclosure
EMC:	According to EN61000-6-2 / EN61000-6-3
Norms and Standards:	IEC Version: IEC61851, SAE1772 / UL Version: UL2202
Certifications:	CE for European market

*on request

Options

CCS Combo1
CCS Combo2
Stand / post for free stand mounting

Branding / Customization

Labels
Front cover
Interface
Housing

Features

Bidirectional V2G/V2H operation
ISO 15118 compatible
Integrated charge controller
Grid compliant

The **ambiCHARGE DC-Wallbox** turns your electric vehicle into a battery on wheels. With years of experience Ambibox has developed an 11kW bidirectional (BiDi) EV charger based on silicon carbide semi-conductors.

The BiDi DC-Wallbox is optimised for the private charging sector and features a passive cooling concept.

That pushes the noise of the wallbox below the threshold of human hearing.

The bidirectional wallbox has been designed for Vehicle To Home (V2H) and Vehicle To Building (V2B) use case and is able to continuously provide both charging and discharging of the vehicle, starting from 100 watts up to the full power of 11kW.

The BiDi Wallbox will be compatible with several commercially available energy management software solutions.

This will allow you to integrate your electric vehicle into your building software and make your electric car an integrale part of your house or office building.

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