THUNDERVOLT POWER

LEVEL 3 EV CHARGER

EV-APX Series

DESCRIPTION

The EV-APX can be equipped with 1 or 2 charging guns, with an output power from 60kW to 240kW, upgradable 320kW, which can charge most EVs with 80% of the mileage within 30 minutes. The EV-APX is compatible with almost all types of Electric Vehicles currently on the market and complies with CCS1 charging plug. NACS plug compatible.

FEATURES

- Integrated Smart HMI: 10-inch high-contrast LCD touchscreen.
- Safe and reliable, with multiple fault protection.
- Ethernet RJ-45 interface networking is adopted, and 4G module is optional, compliant with the
- OCPP 1.6J protocol. Upgraded and adaptable to OCPP 2.0.1.
- RFID charging control approval, with emergency stop function.
- Type 3R/IP54, dustproof, waterproof and anti-corrosion.
- Charging module separated from control system, stable and safe performance.
- Multiple module output in parallel, flexible configuration and easy maintenance.
- Constant power module and smart power allocation, high charging efficiency.
- The control system can be remotely or locally upgraded.

APPLICATIONS

- Retail shopping centers
- Corporate office complexes
- C-Stores & gas stations
- Hotels & resorts
- Restaurants
- Entertainment venues
- Stadiums and sports arenas
- Fleets
- Customer loyalty program

Product Description

PART#	DESCRIPTION	INPUT VOLTAGE	CURRENT	CHARGING INTERFACE	POWER
EV-APX-L3DC	60kW – 320kW EV Charger	480 VAC ±10%, 50/60 Hz	250A	CCS1+CCS1, CCS1+NACS	60kW-240kW

Specifications

MODEL#	EV-APX-L3DC
POWER SPECIFICATION	
Input Voltage Rating	480 VAC ±10%, 50/60 Hz
Power Wiring	3P+N+PE
DC Voltage Output	150 ~ 1000VDC
Charging Connector	CCS1+CCS1, CCS1+NACS
Charging Cable Length	5 meters / 7 meters optional
DC Power Output Rating	60kW / 120kW / 150kW / 180kW / 240kW
Constant Power Range	300 ~ 1000V DC
Maximum Output Current	250A, Max @300A
PF (Power Factor)	>0.98 (Load ≥50%)
THD-I	≤5% (Rating voltage input, load ≥50%)
Peak Efficiency	≥96%
Voltage Stabilized Accuracy	≤±0.5%
Current Stabilized Accuracy	≤±1%
Output Voltage Error	±0.5%
Output Current Error	≤ ±1%(when output current ≥ 30A) / ≤ ±0.3A(when output current<30A)
Ripple Factor	≤ ±0.5% (RMS)
Electric Energy Measurement Method	Measuring DC output electric energy
Connector Mechanical Operating Life	≤10000 times, without load
USER INTERFACE & CONTROL	
Charging Control	RFID
Human-Machine Interface	10-inch high-contrast touch screen
Indictors	High brightness multi-color LED lights
Network Interface	Ethernet (RJ-45) / 4G (optional)
Protocol (EVSE & Backend)	OCPP 1.6J; Security Level 3; upgradable to OCPP 2.0.1
Protocol (EVSE & EV)	DIN70121, ISO15118
ENVIRONMENTAL	
Storage Temperature	-40°C to 75°C
Working Temperature	-30°C to 50°C, derating output in 55°C
Working Humidity	Up to 95% non-condensing
Working Altitude	≤2000m
Cooling Method	Forced air cooling
Protection	Over Voltage Protection; Under Voltage Protection; Over Current Protection; Over Power Protection; Over Temperature Protection; Surge Protection Device; Short Circuit Protection; Inter modulation Distortion; Over Current Protection; Over Voltage Protection; Over Temperature Protection
MECHANICAL	
Protection Ratings	Type 3R
Dimension (WxDxH)	1040mm x 580mm x 2200mm

MODEL#	EV-APX-L3DC
Net Weight	384kg(60kW) 416kg(120kW) 432kg(150kW) 448kg(180kW) 480kg(240kW)
Enclosure Material	Metal
Color	RAL 7032 (Grey)

Additional Information