FASTO V2G
10 indoor

Vehicle To Grid Solutions

Fasto V2G 10 is an electric vehicle charging and discharging equipment with 10kW DC power.

DESCRIPTION

Fasto V2G 10 bidirectional indoor charging equipment is based on CHAdeMO protocol. It was designed to provide energy to the vehicle and supply energy to the grid to the house or to a building, allowing to get benefits from different grid applications: Time shifting, Power balancing and Power quality support. With Fasto V2G 10 you may store energy in your vehicle and use it later, getting benefits in terms of energy costs, CO2 optimization, autonomy, or demand profile flatering.

In addition the equipment has the possibility to be managed remotely and integrated into en获利ility or in building control systems according to context and business models. All these functions and features of the equipment were taken into consideration when developing V2G 10 as absolutely suitable product for any parking.

It is equipped with a full color touch screen that informs the user about the charging process and the status of the charger. Moreover, the enclosure can be customized to create a branded look.

V2G 10 TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Spec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>DC 600 VDC 3Ph+N+PE</td>
</tr>
<tr>
<td>Frequency</td>
<td>50 / 60 Hz 1%</td>
</tr>
<tr>
<td>Nominal input power</td>
<td>10.7 kVA</td>
</tr>
<tr>
<td>Max AC current per phase</td>
<td>16 A</td>
</tr>
<tr>
<td>Power Factor</td>
<td>&gt; 0.95</td>
</tr>
<tr>
<td>THD</td>
<td>&lt; 3%</td>
</tr>
<tr>
<td>Max Power</td>
<td>10 kW</td>
</tr>
<tr>
<td>Max Current</td>
<td>31.5 A</td>
</tr>
<tr>
<td>Output Voltage range</td>
<td>50 – 500 VDC</td>
</tr>
<tr>
<td>Efficiency</td>
<td>&gt; 93%</td>
</tr>
<tr>
<td>Max Power</td>
<td>9.3 kVA</td>
</tr>
<tr>
<td>Max Current</td>
<td>13.5 A</td>
</tr>
<tr>
<td>Output Voltage</td>
<td>400 VAC 3Ph+N+PE</td>
</tr>
<tr>
<td>Power factor</td>
<td>Pure Sine</td>
</tr>
<tr>
<td>Communication protocol</td>
<td>OCPP</td>
</tr>
<tr>
<td>RFID card reader</td>
<td>ISO 14443 type A</td>
</tr>
<tr>
<td>Display</td>
<td>Color display TFT 8”</td>
</tr>
<tr>
<td>Language</td>
<td>Multilanguage</td>
</tr>
</tbody>
</table>

**Environmental Conditions**

- **Temperature**
  - Min: -5°C to 40°C
  - Max: 75°C to 85°C

- **Humidity**
  - Up to 100% relative humidity

- **Altitude**
  - Up to 1000 m

- **Sound Noise**
  - < 55 dB in all directions

**Weight**

- 90 Kg

**Protection degree**

- IP44 indoor

**Cooling system**

- Optional

**Dimensions (W x D x H)**

- 690 x 525 x 1500 mm

**Certification**

- BSI

**Design**

- Multilanguage

**Delivery**

- Optional

**Customization**

- Customizable

**Additional features**

- Short-circuit protection
- Over-current protection
- AC Earth leakage protection
- DC Earth leakage protection
- Anti-islanding
- Emergency stop button
- Isolation system
- Charging/discharging protocol
- Plug type connector

**Additional options**

- RFID card reader
- Display
- Language

**Supported vehicles**

- CHAdeMO (TEPCO)
- CHAdeMO MMC & Nissan
- JEVS G105

**Power Converter Technology**

- Active Rectifier IGBT yes
- Anti-islanding yes
- Emergency stop button yes
- Isolation system yes
- Charging protocol CHAdeMO (TEPCO)
- Discharging protocol CHAdeMO MMC & Nissan
- Plug type connector JEVS G105

**Additional information**

- 10 indoor electric vehicle charging infrastructure

www.enel.com
Vehicle To Grid Solutions
The V2G 10 charging station is a bidirectional charger, being capable of charge and discharge a car at 10kW allowing getting benefits from different grid applications: Time-shift, Power balancing and Power quality support.

Charging batteries for a rapidly expanding fleet of electric vehicles will become a major challenge for our grids. However leveraging EV charging and discharging may play a great opportunity to balance demand and supply, thereby increasing the overall asset efficiency.

These features can be achieved through efficient and smart direction systems capable of accurately managing charging and discharging processes while dealing with the vehicle battery management system and the grid.

Fasto V2G systems allow for bidirectional energy flow and vehicle-to-grid connection, being capable of addressing efficiently charging and discharging capabilities while your electric vehicle is connected to the electric grid.

When connected to the V2G Grid System, an electric vehicle can operate as a generator on wheels, providing a clean and reliable electricity to the grid.

The bidirectional charger has the capability to charge your EV battery pack and can operate like a generator on wheels, powering a house in a rapid and efficient way.

When connected to the V2G Enel System, an electric vehicle efficiently charging and discharging capabilities while your electric vehicle is connected to the electric grid.

In addition the equipment has the possibility to be managed remotely and integrated into a remotely backed or cloud-based control systems according to context and business model. All these features along with international standards compliance makes V2G 10 an absolutely suitable product to any environment.

It is equipped with a full color touch screen that informs the user about the charging process and the status of the charger. Moreover, the enclosure can be customized to create a branded look.

Optional

- Vehicle to Home (V2H) capabilities
- RFID Identification System
- Connection to a local EMS (Energy Management System)
- Charging parameters monitoring
- Remote management system
- Web service access
- Low temperature / High altitude

Vehicle To Grid Solutions
Fasto V2G 10 is an electric vehicle charging and discharging equipment with 10kW DC power.

DESCRIPTION
Fasto V2G 10 wallbox bidirectional charging equipment is based on OCPP 1.5 with V2G protocol. It is designed to provide energy to the vehicle and supply energy to the grid or to a building, allowing get benefits from different grid applications. Time-shift, Power balancing and Power quality support.

V2G 10 Wallbox transfers energy in your vehicle and use it later, getting benefits in terms of energy costs, CO₂ optimization, autonomy, or demanded profile following.

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