

# PRV 2016 -2017

EV Charging Solutions



## Electric vehicle charging stations

Fast and slow charging.  
Chargers for domestic and public road environment.  
Single socket and multisocket solutions.



The range of ZIV PRV charging solutions has been evolving since 2010 to meet the different needs of an expanding market. We present a set of solutions developed in accordance with international regulations that integrate ZIV own technology in control, communications and measuring systems.



ZIV - PRV MODELS	PRV-B	PRV-M	PRV - VP	PRV-DC
<b>Environment</b>	Domestic	Indoor or outdoor	The public highway	Service stations, protected environments
<b>No. of sockets</b>	1	2	2	1 x AC + 1 x DC
<b>Socket</b>	Hose IEC62196-2 (Type 1 or Type 2)	Schuko Hose IEC62196-2 (Type 1 or Type 2) Socket IEC62196-2	Hose IEC62196-2 (Type 1 or Type 2) Socket IEC62196-2	Hoses IEC62196-2 (Type 1 or Type 2) IEC62196-3 (Combo)
<b>Casing</b>	Wall	Wall	Floor	Floor
<b>Power management</b>	No	Yes	Yes	Yes
<b>Standard</b>	IEC51851-1	IEC51851-1	IEC51851-1	IEC51851-1, IEC51851-23 (CCS)
<b>Maximum power per socket</b>	7.4kW (AC single phase)	22kW (AC three phase)	43kW (AC three phase)	50kW (DC)
<b>Supported Modes</b>	Mode 3	Modes 1, 2, 3	Modes 3	Modos 3, 4

The **PRV-M** model has a casing for wall mounted installation, both indoor and outdoor. It incorporates an intelligent meter and can therefore be devoted to domestic or public use: public car parks, hotels, shopping and leisure centres, private fleets, residents' associations, etc.

The **PRV-B**, model also has a wall casing, although it is only designed for domestic use. It incorporates an intelligent connector and can therefore be used in type II layouts in accordance with ITC BT-52.

The new **PRV-VP** has been designed to charge two vehicles simultaneously on a public space.

Finally, the **PRV-DC** enables charging in high-power direct current (50KW), providing a safe, easy and quick service.

## PRV-M

### Dual socket wall charger for public and/or domestic use

- Designed for a domestic and/or public environment
- **Maximum power per socket 22kW** (single phase, 32A)
- 2 sockets in Mode 1, 2 or 3
  - Socket IEC62196-2 Type 2
  - Hose IEC62196-2 Type 1 or 2
  - Schuko
- OCPP 1.2 protocol
- Master/slave system
- 3G cellular communications
- Power management
  - Individual of each PRV
  - Of the entire master/slave system
- RFID Authentication
- Charge postponement option
- Tilt sensor
- Battery for extra autonomy
- Memory storage of executed charge operations



PRV-M



PRV-M

customised

### Industrial Design Prizes:

- Second Prize IDA (International Design Awards) winner
- DELTA Prizes Selection
- Good Design Award winner

## PRV-B

### Wall charger for domestic use

- Designed for a domestic environment (Private or community parking space)
- **Maximum power: 4.7kW** (single phase, 32A)
- 1 socket Mode 3 with hose:
  - IEC62196-2 Type 1 (Yazaki) or
  - IEC62196-2 Type 2 (Mennekes)
- Contains:
  - LEDs. Information necessary for the user
  - Charge postponement option
    - In hour units
    - With button or similar
  - Key
    - Turn PRV on/off
    - Goal: to restrict use
  - Internal storage of executed charging operations
  - Connector option.
  - 3G cellular communication option.



PRV-B

## PRV-VP

### Dual socket charger for the public space

- Designed for the public space
- **Maximum power per socket: 43kW** (three phase, 64A)
- 2 simultaneous sockets in Mode 3
  - Socket IEC62196-2 Type 2
  - Hose IEC62196-2 Type 1 or 2
- OCPP 1.2 protocol
- Master/slave system
- 3G cellular communications
- Power management
  - Individual of each PRV
  - Of the entire master/slave system
- RFID Authentication
- Charge postponement option
- TILT sensor
- Battery for extra autonomy
- Memory storage of executed charging operations



PRV-VP



## PRV-DC

### Dual socket fast charge

- **Maximum power: 50kW (DC)**
- Compact internal distribution
- Small volume to minimise floor occupation and facilitate installation
- Small physical area
- Easy to operate and intuitive user interface
- OCPP 2.0
- Modes supported:
  - Mode 3
    - Maximum power: 22kW
  - Mode 4 (CCS)
    - **Efficiency ~ 95%**
    - High-Frequency Electronics
    - Power converter
- 3G cellular communications
- Power management
  - Individual of each PRV
  - Of the entire master/slave system
- RFID Authentication
- Charge postponement option
- TILT sensor
- Battery for extra autonomy
- Memory storage of executed charging operations



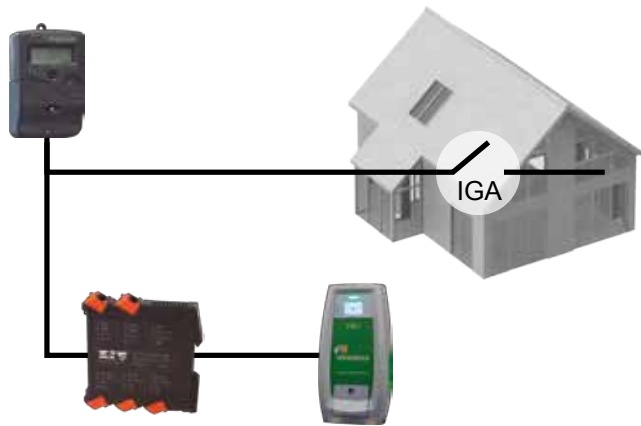
PRV-DC

# RVE

## Electric Vehicle Re-connector

**Permits installation of charging points with the ITC-BT 52 Type 2 layout.**

- Oriented to OEM market (integration within charging points).
- Controls an external contactor in order to disconnect the charging point in the event of a supply failure, enabling the intelligent meter to reconnect the load from the home.
- Minimum physical area, DIN rail.
- Consumption almost nil ( $\mu\text{A}$ ).



esquema ITC-BT 52 Tipo 2.

# OEM Solutions



Intelligent single phase / three phase meter  
ZIV 5CTM and 5CTD



Compact WAN router – ZIV EMR

Control module for ZIV  
CRV charging station





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ZIV continually strives to improve products and services. The technical information included in this document is subject to change without notice.

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