



# Guidance to Installers of Viridian EV charge points



This guide is intended to instruct in the proper installation of a Viridian EV charge point. Please note that when installing this equipment care must be taken to ensure that all local and national safety and planning requirements are met.

**INSTALLATION OF THIS EQUIPMENT SHOULD ONLY BE CARRIED OUT BY A FULLY QUALIFIED INDIVIDUAL. VIRIDIAN EV ACCEPTS NO RESPONSIBILITY FOR DAMAGE CAUSED BY IMPROPERLY INSTALLED EQUIPMENT.**

### Cautions and Dangers

This guide contains several instructions to which the following symbols have been attached. Failure to comply with instruction could result in:



**DANGER** Indicates where failure to comply with instructions will cause death or serious injury.



**WARNING** Indicates where failure to comply with instructions could lead to death or serious injury.



**CAUTION** Indicates where failure to comply with instructions could lead to minor or moderate injury.

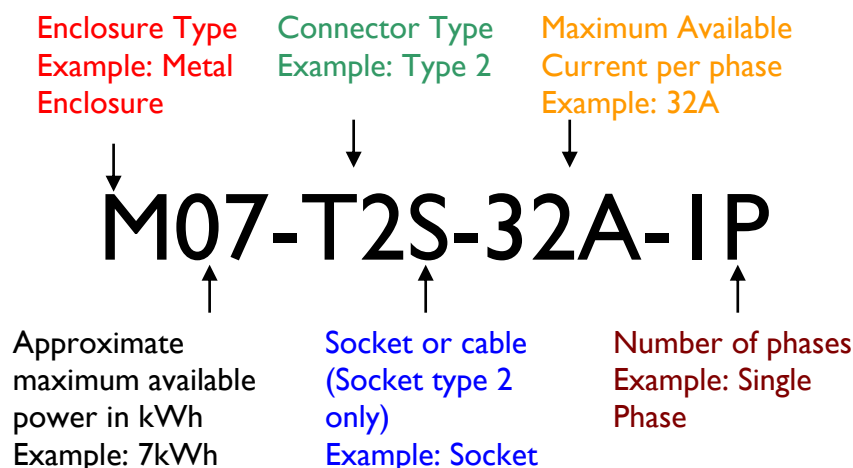
This document is intended to instruct in the installation of all models of Viridian manufactured charge points (current model numbers at the time of writing listed below). Instructions specific to particular models will be highlighted and clearly marked.

M03-T1C-16A-IP  
M03-T2C-16A-IP  
M03-T2S-16A-IP

M07-T1C-32A-IP  
M07-T2C-32A-IP  
M07-T2S-32A-IP

M12-T2C-16A-3P  
M12-T2S-16A-3P  
M22-T2C-32A-3P  
M22-T2S-32A-3P

### Understanding the model number of your charge point





## WARNING

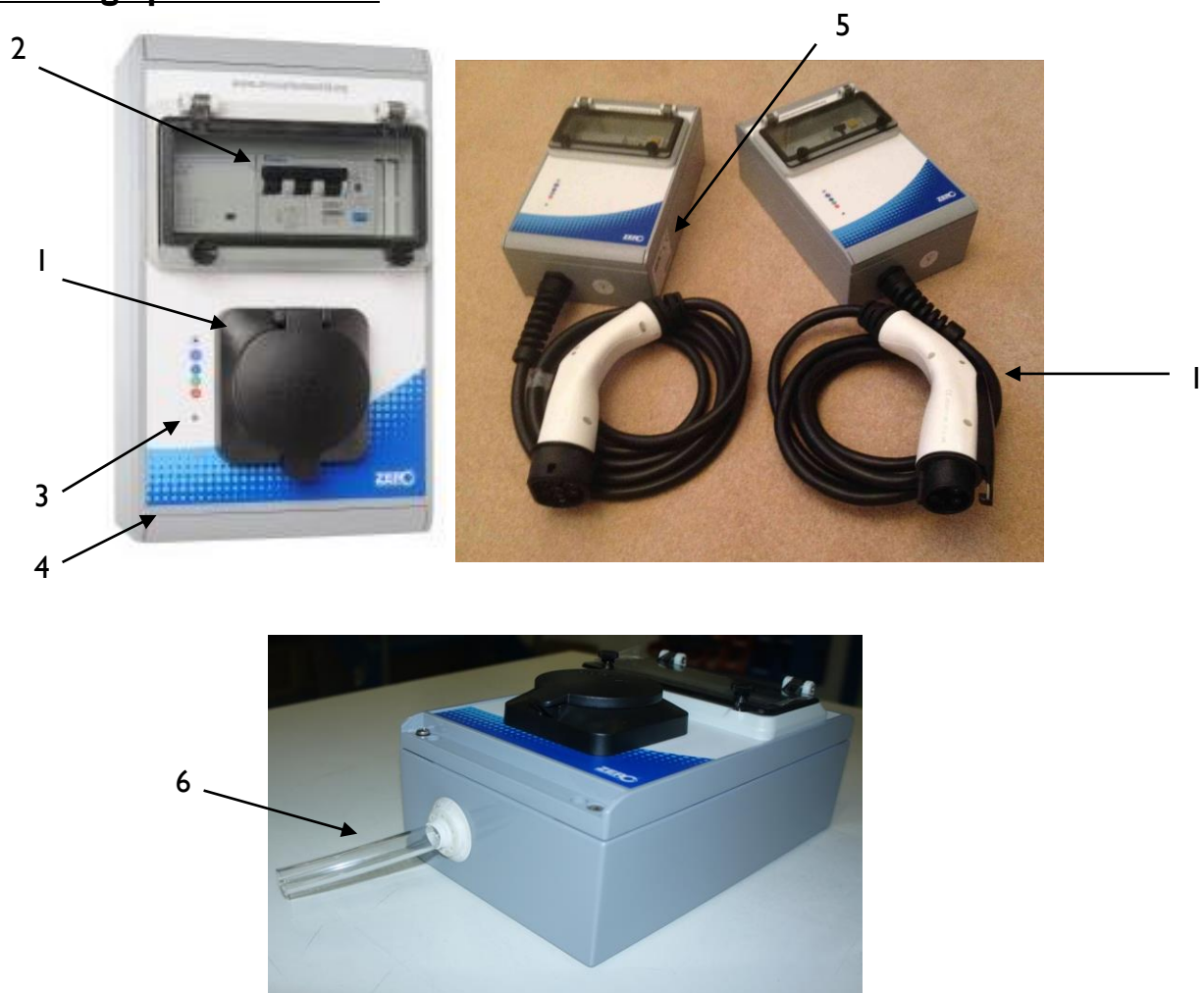
The charge point is designed for electric vehicle (EV) charging only. It is designed to only allow the flow of electricity once an EV is connected and correct communication is established. Any tampering of the charge point to allow the flow of electricity at any times other than this will present a risk of electric shock.



## CAUTION

The Charge point is covered by a manufacturers parts and labour warranty. Alterations to the charge point that are not permitted will invalidate this warranty.

**Fig. A - Charge point Features**



1. The charge point connects to an EV via the attached vehicle coupler (shown right) or via the socket (shown left). Models fitted with sockets allow the use of a range of approved interconnecting cables.
2. Integrated RCBO
3. Status LED
4. Cover strips
5. Identification label
6. Socket drainage tube

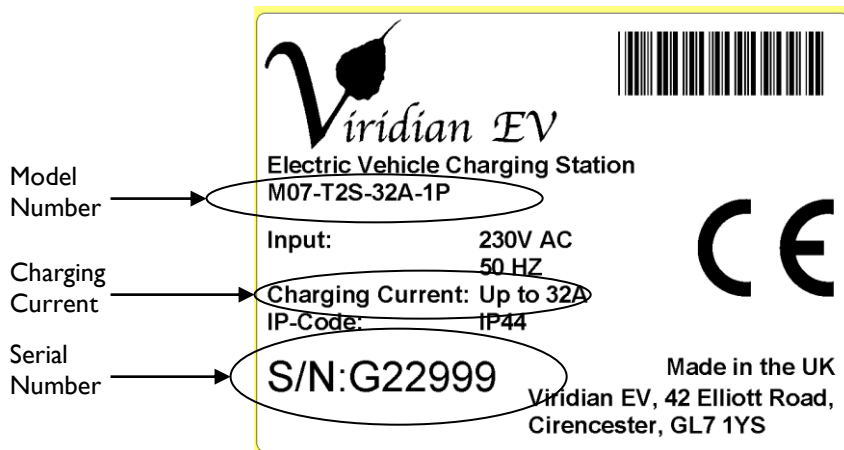


Fig. B - Identification label breakdown

### **Mounting of the charge point**

The charge point should be mounted vertically on either a post or a wall. The position of the charge point should allow all main functions of the charge point to be accessible between 750mm and 1200mm of the ground in accordance with BS8300:2009, unless otherwise instructed not to. The charge point has four integrated mounting holes that are accessible by removing the cover strips (Fig. A - 4).

### **Internal components**

1. Contactor
2. RCBO
3. EPC
4. Mains input Earth terminal
5. Main charge point earth point.
6. Label stating the equipment must be earthed

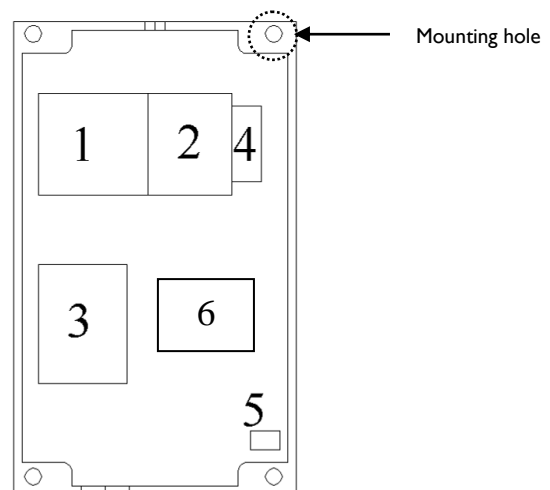


Fig. C – Inside the box

## Installation method



### **DANGER**

Installation requires access to the properties electrical consumer unit. Ensure that power to it is isolated before commencing any work.



### **WARNING**

Due to the high and constant current draw, the charge point must be installed on a dedicated spur within the consumer unit.



### **CAUTION**

The charge point must be installed in accordance with all current safety and legislative requirements relevant to the location to which it is being installed. If any of the actions listed by the installation method described below contravene current safety and legislative requirements, they **MUST** be adjusted to meet the required standard. If that is **NOT** possible they **MUST NOT** be done.

## **THE INSTALLER MUST ENSURE THE CHARGE POINT IS EARTHED**

It is recommended but not required that an isolation switch should be located near the charge point.

Plastic hinges have been provided with the charge point for optional fitting to the two rightmost slots under the cover strips (Fig. A - 4). These hinges allow the front panel of the charge point to hinge to the right of the rear casing allowing work to be carried out on the unit without removal of the front panel.

- Install a MCCB within the consumer unit that is appropriately rated for the charge point(s) that is being installed.
- Drill an appropriate sized hole on the side of the charge point for a cable gland, ensuring that no damage is done to any internal components or wiring and removing any burrs and swarf that may have been generated in the process. The cable gland used must be suitably rated for the location of the charge point.
- The charge point should be secured to a wall or post as described on page 4.
- Pass a suitably rated cable for the current draw, cable length and cable chasing method directly\* from the consumer unit through the gland and connect **LIVE** and **NEUTRAL** to the correct terminals of the RCBO (Fig. C - 2). The terminals should be tightened to between 2.5 and 3Nm. For three phase charge points ensure that all 3 **LIVE** are connected to the correct terminals

\*If you are carrying out an OLEV approved install, an external energy meter is required between the charge point and consumer unit. It is recommended that you use an Emlite ASLH 382. The Emlite must be positioned in a suitable location to receive a GSM signal

- Connect the **EARTH** to the mains input earth terminal (Fig. C - 4) **THE INSTALLER MUST ENSURE THE CHARGE POINT IS CORRECTLY EARTHED.**

- Inspect **ALL** other connections as these may have become loose in transit.
- For all **T2S** type chargers connect the drain tube supplied to the bottom of the socket (Fig. A – 6) pulling the excess liquid through to the outside of the charge point.
- Close and secure the lid using the four supplied captive screws.
- Replace the cover strips.
- Ensure all cables connected to the charge point are suitably secured.
- Re-establish the electrical connection and test the RCBO for correct operation.
- The status LED should be flashing blue to indicate that the charge point is ready to charge
- Test the operation of the charge point on an EV simulation box and if possible the customers EV.
- It is recommended that you notify the local DNO that you have completed a charge point install. This **MUST** however be done on an OLEV approved install. If this is a second charging install, you must state both this and the combined current rating of both chargers.
- If at any time during the install the charge point is damaged you **MUST** stop the current installation and restart it using a new charge point.
- On completion of the install, please ensure
  - The customer receives the *User Guide for Viridian EV Charge point* leaflet.
  - The customer receives a demonstration on how to use the charge point and its features.
  - You demonstrate the RCBO test function and instruct them to do this monthly.
  - The customer is shown how to isolate the power to the charge point in the event of an electrical fault.
  - The customer receives information on the warranty and what to do in the event of a claim.
  - The customer receives your contact details in case of any issues that may arise within the warranty period. (A space has been provided at the back of the *User Guide for Viridian EV Charge point* leaflet)
  - For OLEV installations: A note is taken of the Emlite meter serial number and the charge point serial number (optionally: the customer's name and address). Direct these to [team@viridianev.energy](mailto:team@viridianev.energy) at your earliest convenience. (Forwarding the photos taken for OLEV's requirements is suitable method).
  - For OLEV installations: Permission is obtained if passing the customer's name and address back to us, the manufacturer, for the purpose of record keeping and identifying the installations.<sup>1</sup>

<sup>1</sup>The information will never be passed on to any other party or company. The information will also enable us to produce usage data for users of our charge points if requested.

## Service and maintenance



### **DANGER**

Contact with live components can result in serious injuries. Isolate the power before commencing any work.

### **THERE ARE NO USER SERVICEABLE COMPONENTS WITHIN THIS CHARGE POINT.**

**Please note** that even though every care has been taken to select only the highest quality components, in the event that you should experience problems with this unit servicing should only be carried out by a suitably qualified individual. As the charge point is modular in design the affected component can be replaced on site with the defective part being sent back to the manufacture for analysis.

### **Procedure**

- Isolate all power to the charge point.
- Disconnect the wiring from the affected component by loosening the terminals.
- Remove the device by pulling the locking slider and swivel the device away from the DIN rail.
- Install a new device by placing it over the DIN rail and firmly pushing it down until it clicks into place.
- Reconnect all wiring and check that **all** connections are tightened to the required torque.
- Re-establish the power supply to the charge point.

### **Cleaning**

It is recommended that cleaning of the outside of the charge point should be performed using a damp cloth and a mild cleaning solution.



### **CAUTION**

Cleaning the charge point with a high-pressure water hose is not permitted and could cause water build up within the charge point.

The charge point should not be opened and cleaned internally.

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Viridian EV is a trading name of EcoHarmony Ltd.