

# QUANTUM:EV

## EV OPENCHARGE

Single and Three Phase  
Socketed EV Chargers  
(GPRS/Ethernet Communication)



COMPLIANT

## INSTALLATION & OPERATION MANUAL

### MODELS:

#### SINGLE PHASE

OCPP0410	1 X 3.6kW
OCPP0411	1 X 7.2kW
OCPP0420	2 X 3.6kW
OCPP0421	2 X 7.2kW
OCPP0425	4 X 7.2kW

#### 3 PHASE

OCPP0412	1 X 11kW
OCPP0413	1 X 22kW
OCPP0422	2 X 11kW
OCPP0423	2 X 22kW


**ROLEC**  
EV Charging

Installation & Operation Manual  
EVQROCM-01-V03-R0 January 2022



## Amendments

Amendment Number	Details	Date
Ver 1, Rev 0	New Document.	September 2020
Ver 2, Rev 0	Amended to include VendElectric details.	December 2020
Ver 2, Rev 1	Amendment to Host and Installer Guides Amendment to Specification Wording Addition of Connector Type Label	April 2021
Ver 2, Rev 2	Correction to Compliances Table	August 2021
Ver 3 Rev 0	Addition of 4-Way Charger Addition of maintenance information	January 2022

Product:	Quantum:EV OpenCharge		
Applicable Models:	Single Phase	Three Phase Superfast	
	OCPP0410	OCPP0412	
	OCPP0411	OCPP0413	
	OCPP0420	OCPP0422	
	OCPP0421	OCPP0423	
	OCPP0425		
Document Type:	Installation and Operation Manual		
Document Code:	EVQROCM-01-V03-R0		
Language:	UK English (Original)		
Date Published:	January 2022		
<p>Rolec Services Ltd are the publishers of this document and own the rights to use the text, images and all technical content contained within. Content supplied by third parties / partner organisations remains the property of that organisation and is used by agreement with the supplier.</p> <p>Rolec Services Ltd exercise care to ensure content is as accurate as possible at the time of publication. However, no guarantee of accuracy should be inferred.</p>			
<p>Rolec Services Ltd, Ralphs Lane, Boston, Lincolnshire PE20 1QU, United Kingdom.</p> <p>+44 (0) 1205 724754</p> <p>enquiries@rolecserv.co.uk</p>			

## Contents

<b>Product Support</b>	<b>2</b>
<b>Safety</b>	<b>3</b>
Safety Advice within this Manual	3
<b>Product Overview</b>	<b>4</b>
Product Features	4
<b>Product Specification</b>	<b>5</b>
Physical Specification	5
Electrical Specification	6
Certifications and Compliances	7
<b>Options and Accessories</b>	<b>7</b>
<b>Unpacking</b>	<b>7</b>
Typical Contents	7
<b>Labelling</b>	<b>8</b>
Information Labels	8
<b>Installation</b>	<b>9</b>
Schematics	10
Before Installation	15
Installation Procedure	15
Base Installation – If Supplied:	15
If a Base is Not Supplied:	15
Install the Pedestal	16
<b>Commissioning</b>	<b>18</b>
Commissioning with VendElectric	18
LED Illumination	18
After Installation	18
<b>Operation</b>	<b>19</b>
VendElectric EV Driver Application	19
Status Indicator Guide	19
To End a Charging Session	20
Charging Cables and Sockets	20
<b>Maintenance</b>	<b>21</b>
External Cleaning and Inspection	21
Suggested Inspection and Testing	22
<b>VendElectric Host's Guide</b>	<b>23</b>
<b>VendElectric Installer's Guide</b>	<b>24</b>
<b>Installers Notes</b>	<b>25</b>

## Product Support

- Please go to [www.rolecserv.com](http://www.rolecserv.com) and refer to the product support area.
- For installation assistance and advice, contact your preferred electrical installer.



## Safety

This manual is specifically applicable to the Quantum:EV OpenCharge electric vehicle charging product and is provided as a guide to its installation and operation.



**IMPORTANT:** Installers and End Users must read and understand the content of this manual before installation and/or use of the product.

Installation must only be performed by someone who is properly qualified and competent to do so in accordance with the current legislation applicable in the geographical region of the installation.

- Rolec Services Ltd cannot accept any responsibility for improper installation or any problems arising from improper installation.

**NOTE:** Damage to the equipment, connected systems or to property caused by improper installation are the responsibility of the installer.

- The information provided in this manual must **ONLY** be used with the model(s) listed on page 1 of this manual.
- The information provided in this manual must **NOT** be used with any other product.
- The content of this manual may be updated by the manufacturer as required.
- Do **NOT** use the equipment for anything other than its intended purpose.
- Do **NOT** modify the equipment unless specifically instructed to do so by the manufacturer.
- Do **NOT** attempt to repair the equipment unless specifically instructed to do so by the manufacturer.
- To maintain electrical safety, the body enclosure of the product (access covers) must be secured in their correct location using the supplied fasteners and the seal must be sufficient to maintain the IP rating of the enclosure.
- Fasteners used to mount the product in its working location must be sufficient for the task and the specific mounting point.
- If required, fasteners used to mount the product in its working location should be sealed to maintain the IP rating of the enclosure.
- Damage to the product may render it unsafe. The product must be electrically isolated and **NOT** used until appropriate remedial action has been performed.

## Safety Advice within this Manual

Rolec manuals use a system of warnings, cautions and notes.

- **WARNINGS** concern the safety of installers/end user and will be given before the detail/instructions in the manual.
- **CAUTIONS** concern the potential for damage to the equipment and will be given before the detail/instructions in the manual.
- **NOTES** are given to provide additional information and/or to highlight information of importance. They will be given either before or after the detail/instructions as appropriate and may use different wording (such as **IMPORTANT**) where emphasis is required.

Warnings, Cautions and Notes may be repeated several times as appropriate and may be preceded by a hazard symbol where appropriate.

## Product Overview

The Quantum:EV OpenCharge is an OCPP compliant, smart charging unit which has been designed to provide the Host with full visibility and control of its use and, for the driver, a simple to use EV charging solution activated via an RFID card/fob or an online web or phone application which allows control of the unit and views of their charging activity.

The Quantum:EV OpenCharge is available with the following power options:

Model Number	Specification
OCPP0410	Quantum:EV OpenCharge OCPP - 1x 3.6kW (16A) Type 2 socket
OCPP0411	Quantum:EV OpenCharge OCPP - 1x 7.2kW (32A) Type 2 socket
OCPP0420	Quantum:EV OpenCharge OCPP - 2x 3.6kW (16A) Type 2 sockets
OCPP0421	Quantum:EV OpenCharge OCPP - 2x 7.2kW (32A) Type 2 sockets
OCPP0425	Quantum:EV OpenCharge OCPP - 4x 7.2kW (32A) Type 2 sockets
OCPP0412	Quantum:EV OpenCharge OCPP - 1x 11kW (16A) Type 2 socket
OCPP0413	Quantum:EV OpenCharge OCPP - 1x 22kW (32A) Type 2 socket
OCPP0422	Quantum:EV OpenCharge OCPP - 2x 11kW (16A) Type 2 sockets
OCPP0423	Quantum:EV OpenCharge OCPP - 2x 22kW (32A) Type 2 sockets

Refer to the Product Specification on page 5 for further details.

## Product Features

- Mode 3 (IEC 61851-1) charging
- Type 2 (IEC 62196) charging socket(s) c/w security hatchlock(s)
- Built-in RFID reader(s)
- Photocell controlled LED amenity lighting head
- Surface or roof mountable
- Built-in AC overload protection (MCB)
- Built-in AC & DC fault protection (RCD)
- Built-in LED charging status indicator socket halo(s)
- Built-in class 1 MID compliant kWh meter(s)
- IP Rated, UV stabilised, fire retardant, IK10 impact & corrosion resistant
- OCPP 1.6 compliant (Can integrate with any back office)
- Remote firmware updates
- EV driver Pay-to-Charge smartphone integration
- Smart charging control via mobile phone and/or RFID
- Can integrate with any chosen OCPP back office management system
- On board GPRS modem with antenna
- Ethernet connection

Product Specification

Physical Specification

Dimensions	1440 x 375 x 275mm (HxWxD)
Materials	<ul style="list-style-type: none"><li>• <b>Chassis</b> – 2.5mm, 6063 extruded aluminium with 25µm anodised finish</li><li>• <b>Panels</b> – 3.2mm Aluminium composite</li><li>• <b>LED lens</b> – Impact resistant 3mm Polycarbonate</li><li>• <b>Base</b> – Impact resistant, 5mm Polycarbonate</li></ul>
Mass	< 32 kg
Operating Temperature	-30°C to +50°C
Operating Humidity Range	5% to 95%

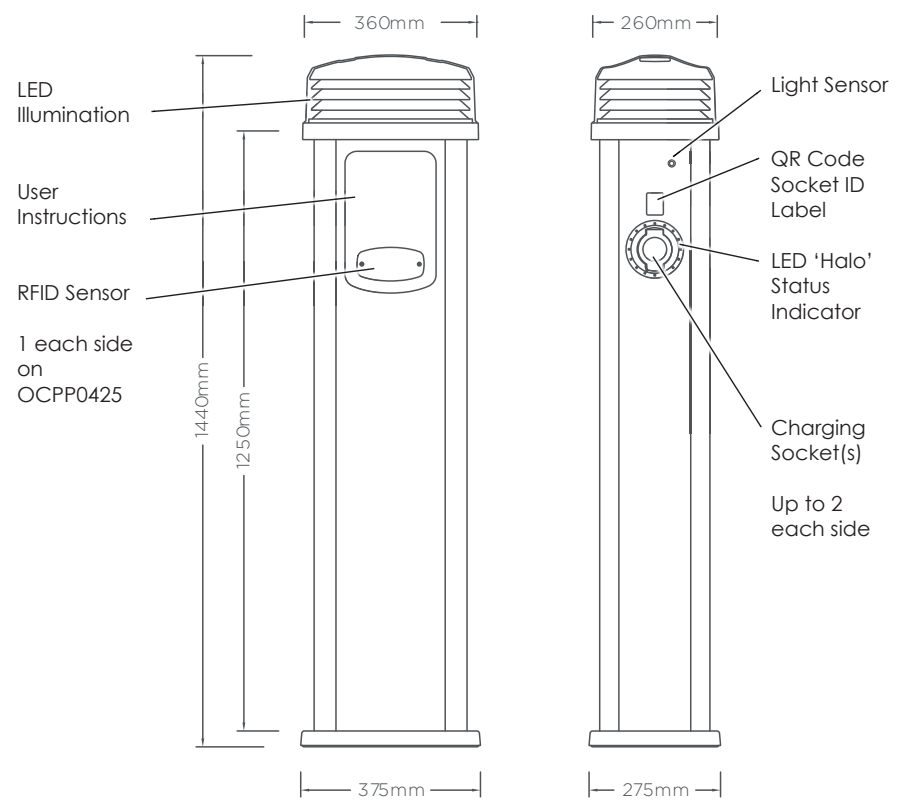


Figure 1 General Arrangement and Dimensions

**NOTE:** Depending on the model, a GPRS antenna(s) is mounted either above the socket(s) on the side of the pedestal, or on the back panel of the pedestal.

## Electrical Specification

Product Code	OCPP0410	OCPP0411	OCPP0420	OCPP0421	OCPP0425
Charging Socket(s)	1x Type 2 (IEC 62196)		2x Type 2 (IEC 62196)		4x Type 2 (IEC 62196)
AC Charging Output	1 x 3.6kW (16A)	1 x 7.2kW (32A)	2 x 3.6kW (16A)	2 x 7.2kW (32A)	4 x 7.2kW (32A)
Charge Protocol	Mode 3				
AC Overload Protection	1x C20A MCB	1x C40A MCB	2x C20A MCBs	2x C40A MCBs	4x C40A MCBs
AC & DC Fault Protection	1x Type B RCD		2x Type B RCDs		4x Type B RCDs
Input Supply	1x 16A 230V AC/50Hz (Single Phase)	1x 32A 230V AC/50Hz (Single Phase)	1x 32A 230V AC/50Hz (Single Phase)	1x 63A 230V AC/50Hz (Single Phase)	2x 63A 230V AC/50Hz (Single Phase)
Cable Terminals	3x 50 mm				(2x) 3x 50 mm*
Communications	GPRS (Recommended signal strength of 14 CSQ or better), or				
	RJ45 ethernet connection				2x RJ45 ethernet connections
Operating Temperature	-30°C to +50°C				

\*Alternative cable terminal options available upon request

Product Code	OCPP0412	OCPP0410	OCPP0422	OCPP0423
Charging Socket(s)	1x Type 2 (IEC 62196)		2x Type 2 (IEC 62196)	
AC Charging Output	1 x 11kW (16A)	1 x 22kW (32A)	2 x 11kW (16A)	2 x 22kW (32A)
Charge Protocol	Mode 3			
AC Overload Protection	1x C20A MCB	1x C40A MCB	2x C20A MCBs	2x C40A MCBs
AC & DC Fault Protection	1x Type B RCD		2x Type B RCDs	
Input Supply	1x 16A 400VAC 50Hz (3 Phase)	1x 32A 400VAC 50Hz (3 Phase)	1x 32A 400VAC 50Hz (3 Phase)	1x 63A 400VAC 50Hz (3 Phase)
Cable Terminals	5x 50 mm			
Communications	GPRS (Recommended signal strength of 14 CSQ or better) RJ45 ethernet connection			
Operating Temperature	-30°C to +50°C			

## Certifications and Compliances

This product has been designed and built in accordance with the following standards and legislation:

OCPP	Version 1.6 J.
Charging Compliance	EN 61851-1:2011,
Wiring Regulations	BS 7671.
EMC Compliance	EN 301 489-01 V2.2.0, EN 301 489-03 V2.1.1, EN 301 489-52 V1.1.0, EN 50470-1:2006 (1x Skt) or EN 55032:2012 (2x & 4x Skts), (2014/30/EU).
Safety Compliance (LVD)	2014/35/EU.
Product Safety	EN 62368-1:2014.
Radio Equipment Directive Spectrum/ Telecom (Art. 3(2)):	EN 301 511 V9.0.2, EN 300 330 v2.1.1, EN 62311:2008, 2014/53/EU.
Environmental Protection	BS EN 60529:1992+A2:2013, <ul style="list-style-type: none"> <li>Enclosure IP66,</li> <li>Socket IP54.</li> </ul> BS EN62262:2008, <ul style="list-style-type: none"> <li>Enclosure IK10 impact rating.</li> </ul>
Plug(s)/Socket(s)	BS EN 62196-1:2014, BS EN 62196-2:2017.
Fire Rating	UL94 Flame Rating at V2 for 1.5 mm and 3.0 mm.
RoHS / REACH	1907/2006, 2011/65/EU.



## Options and Accessories

- RFID card/fobs
- Load Manager system (electrical distribution management)
- Corporate branding (colours, logo badge, etc.)
- Galvanised steel ground mounting base
- Protection barriers
- Charge point signage
- EV charging cables (Type 1 to Type 2 or Type 2 to Type 2)

## Unpacking

The content of the package depends on the model ordered and any options or accessories.

**IMPORTANT:** Make sure all packaging is disposed of responsibly and in accordance with the current regulations in your region.

## Typical Contents

- EV Charger
- Rubber Splash Mat
- Installation and Operators Manual + VendElectric instructions



## Labelling

Installers must observe any/all warning labels displayed on the equipment or inside the equipment enclosure.

Labels may be in the form of adhesive 'stickers', plates, and/or moulded into the surface of components.

## Information Labels



Figure 2 Typical Product / Rating Labels



Figure 3 Typical Fascia Label



Figure 4 RFID and Socket Selection Label (4-Way Only)



Figure 5 Socket QR Code Label Example



Figure 6 Electricity Warning Label (as appropriate)



Figure 7 Power Rating Label (as appropriate)

### NOTES:

- Branding on labels may be different to that shown above.

## Installation



**IMPORTANT:** Installers and End Users **must** read and **understand** the content of this manual before installation and/or use of the product.

Installation must **only** be performed by someone who is properly qualified and competent to do so in accordance with the current legislation in force in the geographical location of the installation.

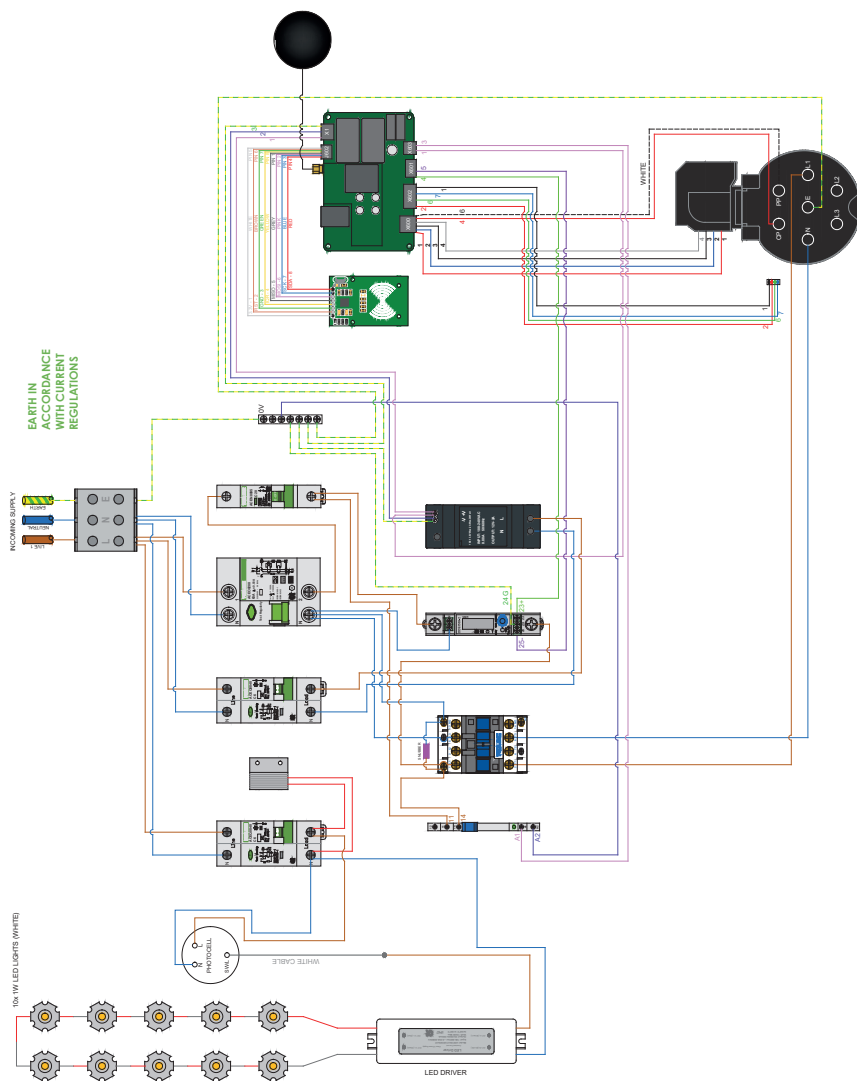
- Advice provided in this manual does NOT override any legislation.
- Rolec Services Ltd cannot accept any responsibility for improper installation or any problems arising from improper installation.

**NOTE:** Damage to the equipment, connected systems or to property caused by improper installation are the responsibility of the installer.

## Schematics

Applicable to Single Phase, Single Socket Models:

- OCPP0410
- OCPP0411



**Figure 8 Single Phase Single Socket Quantum:EV OpenCharge – Schematic**

Applicable to Single Phase, Double Socket Models:

- OCPP0420
- OCPP0421

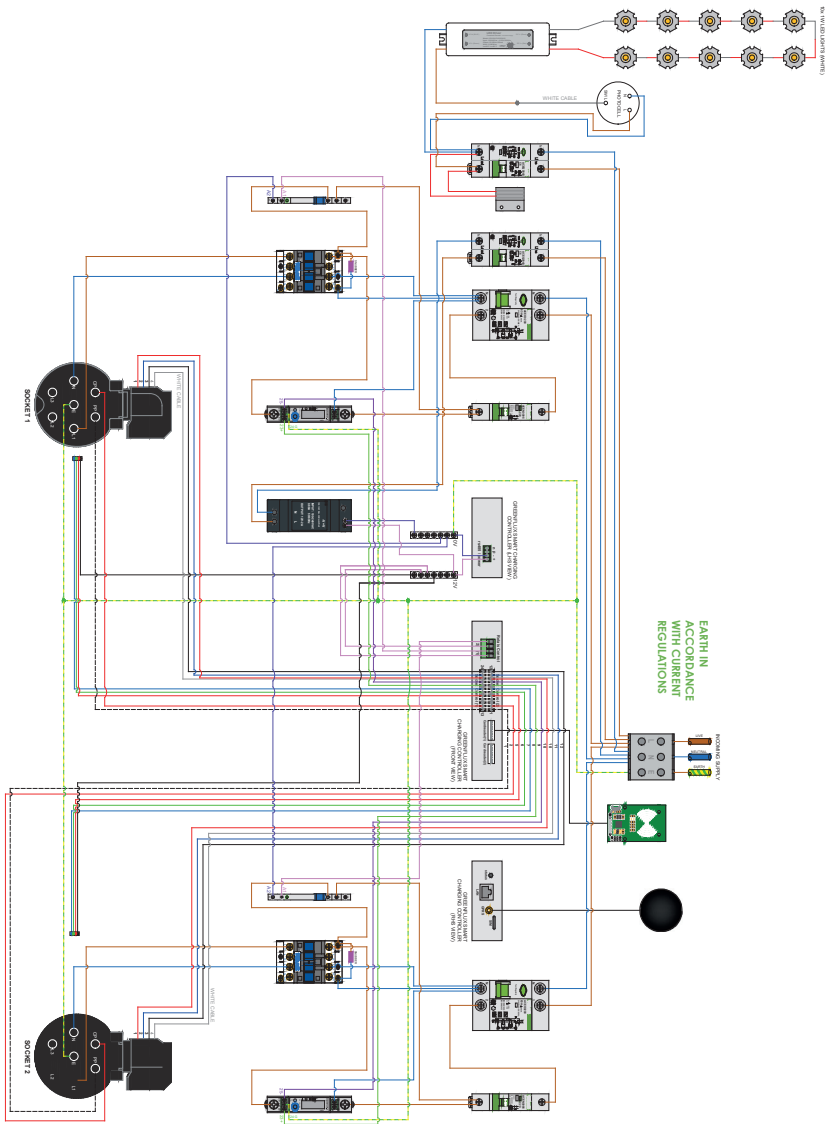
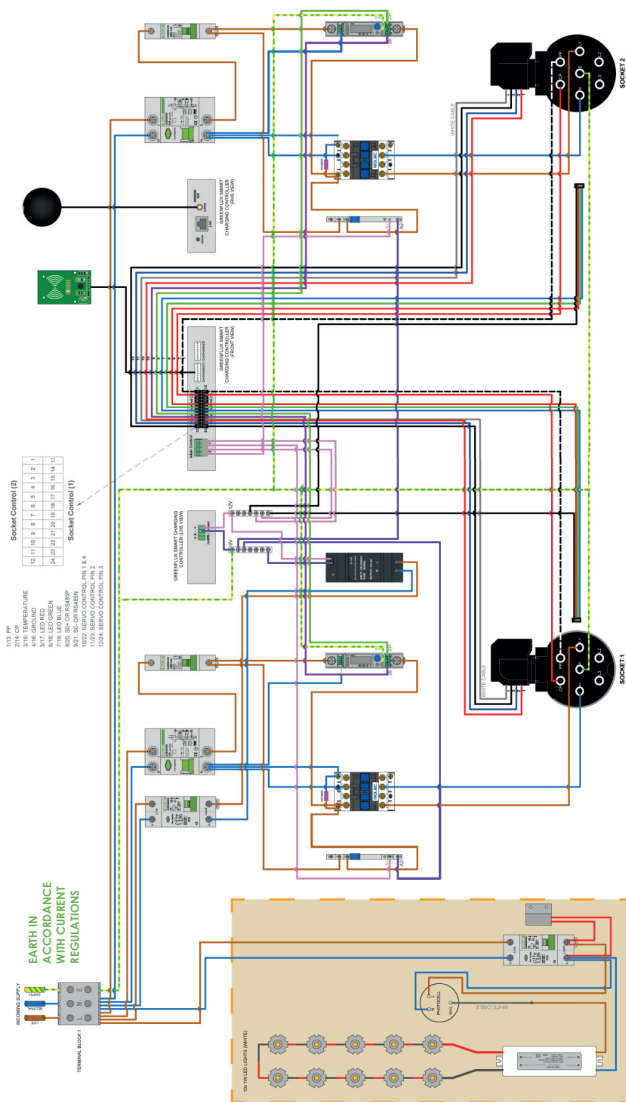


Figure 9 Single Phase Double Socket Quantum:EV OpenCharge – Schematic

Applicable to Single Phase, Four Socket Model:

- OCPP0425

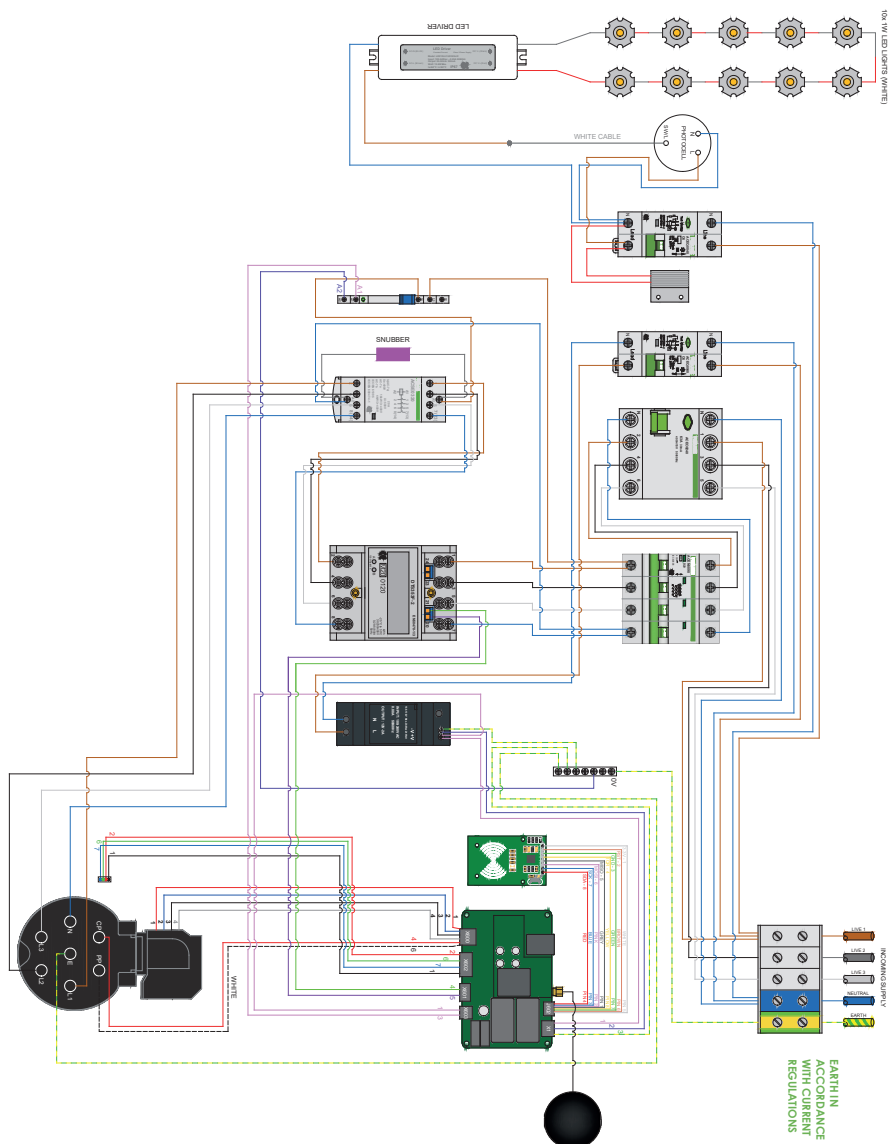


Attached to  
one circuit only.

**NOTE:** The 4x Socket Quantum is, effectively, two 2x socket Quantum's in one pedestal enclosure. With the exception of the components highlighted above, which are only fitted to ONE of the circuits, both charging circuits are the same and have individual power input terminals and ethernet connections.

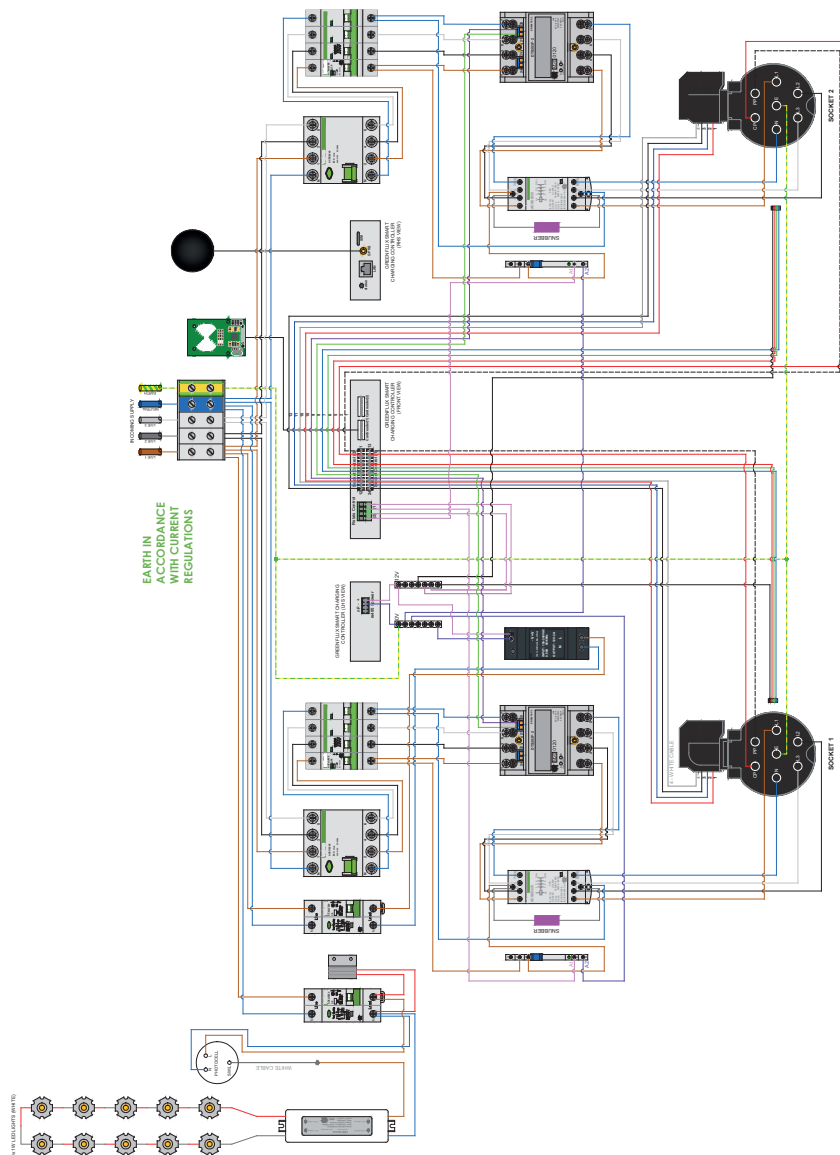
Figure 10 Single Phase Four Socket Quantum:EV OpenCharge – Schematic

- OCPP0412
- OCPP0413



**Figure 11 Three Phase Single Socket Quantum:EV OpenCharge – Schematic**

- OCPP0422
- OCPP0423



**Figure 12 Three Phase Double Socket Quantum:EV OpenCharge – Schematic**

## Before Installation

### **IMPORTANT: Signal Strength**

Units using GPRS to communicate with a cloud-based back office contain a roaming SIM card which connects to the strongest signal available.

It is assumed that a suitable GPRS signal has already been verified by the end user/installer prior to installation.

- Units using GPRS require a suitable GPRS signal of **14 CSQ** or better.
- Rolec cannot be held responsible or accountable in the event a GPRS unit is installed in a location without adequate network signal.

1. Establish a suitable site location for the unit that is both secure and environmentally safe.
2. Make sure the location meets current legislation (if applicable).
3. Make sure the unit and any accessories have not been damaged in transit.

**NOTE:** Items damaged in transit must first be reported to the courier and then to the supplier.

Where possible, photographic evidence of package and/or item damage should be provided.

4. Make sure the unit model is correct and matches the order.

**NOTE:** Incorrect or damaged units must NOT be installed. Contact your supplier to discuss rectification.

## Installation Procedure

If protective bollards or barriers will be used, consider installing them at the point of site preparation.

### Base Installation – If Supplied:

1. Prepare the ground and set the ground mounting base in the desired location.
  - Make sure the power supply cable and ethernet cable (if required) is fed upward through the middle of the base.
2. Concrete the base into place and allow time for it to set.
  - The lip of the base should be 2 – 3 mm above the surrounding ground level.

### If a Base is Not Supplied:

1. Prepare a suitable area of firm, flat ground.
  - It must be possible to secure the charger to the ground with bolts or similar fixings that are appropriate to the type of prepared ground.
  - Typically, into concrete, M8 x 100 mm Anchor Bolts should be used but installers must assess the site and choose the most appropriate fixing for their needs.
  - Make sure the power supply cable and ethernet cable (if required) is fed upward through the middle of the pedestal mounting location.



## Install the Pedestal

**IMPORTANT:** All electrical work must be performed in accordance with the current Electrical Wiring Regulations applicable in the geographical region of the installation.



**CAUTION: Equipment Damage**

Do NOT use power tools to remove/install panel fixings.  
 Power tools can damage the fixings, making the panel difficult to remove.  
 Use hand tools ONLY and do not overtighten fasteners.

**CAUTION: Equipment Damage**

During the next steps the charger front panel will be removed. Take care to not damage cables or components.

1. Remove and retain the fixings securing the front panel to the pedestal chassis.
2. Carefully ease the **front** panel away from the unit to gain access to the interior.

**CAUTION: Equipment Damage**

Fascia panels may be connected to the main assembly by electrical cables. Take care not to damage, strain, or disconnect the cables. Make sure all connections are secure before refitting the panel.

3. If required, cut 'X' shaped slits in the rubber splash mat to match the mounting points of the base and to allow entry of the power and ethernet cable (if required).
4. Fit the mat over the cables and onto the ground mounting base or the securing points if a base was not supplied.
5. Carefully lift the pedestal then lower the chassis over the cables and onto either:
  - the ground mounting base (align the four holes in the chassis with the four studs of the base).
  - the prepared surface.
6. Route the cables to the appropriate length to be able to connect to the terminals within the chassis.
7. Secure the chassis to the ground with the correct fixings for the location.
8. Trim around the pedestal base to remove any excess rubber from the splash mat (if required).

**NOTE:** All electrical work must be performed in accordance with the current legislation applicable in the geographical region of the installation.

**CAUTION; Equipment Damage – Sensitive Equipment**

If you will be performing insulation resistance tests on the power supply cables, it is advised to be done **BEFORE** connecting the cable to the charger. The high voltages applied during the test may damage sensitive components if tested after the cable is connected.

9. Terminate the supply cable in the appropriate manner and connect to the pedestal in accordance with the appropriate schematic.
10. If required, connect the Ethernet cable to the Communications unit.

11. Make sure all cable connections are secure and have not become loose or damaged in transit or during installation.
12. Make sure ALL debris is removed from the front and rear halves of the enclosure and that no debris is present on any of the components.

**NOTE:** Debris and similar pollutants can adversely affect the performance and working life expectancy of components and will invalidate the product/component warranty.

**IMPORTANT NOTE:**

It is the responsibility of the installing engineer to satisfy themselves, that all cable terminations throughout this product are secure and tight and have not become loose, strained, or disconnected during transit and/or installation.

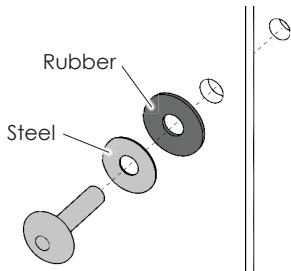
13. Switch ON the power to the unit and test in accordance with the current legislation applicable in the geographical region of the installation.
  - Make sure this product has been installed in compliance with the current Electrical Wiring Regulations (including recommended earthing arrangements).
14. Make sure you are satisfied that the installation is complete and is in a safe condition.



**CAUTION: Equipment Damage**

Do NOT use power tools to remove/install panel fixings.  
Use hand tools ONLY and do not overtighten fasteners.

15. Refit the front Fascia panel, taking care not to trap any electrical cables. Secure the panel with the fixings removed earlier in the procedure.



- Make sure the rubber washer on the fixing is in good condition and is correctly placed between the fascia and the washer.
- Slight compression of the rubber washer helps to maintain the water resistance of the pedestal.
- Do NOT over tighten the fixings.

## Commissioning

If the VendElectric service is **NOT** being used, another service provider will be required to administer smart services and commissioning will need to be performed in accordance with the alternative service provider's instructions.

### Commissioning with VendElectric

**NOTE:** A Smartphone or similar web enabled device with a working internet connection is required for the next steps.

1. All preliminary tasks listed in the **Host's Guide** (shown at the end of this manual) must have been performed by the customer (Host) before commissioning can proceed.
2. To complete commissioning, refer to the **Installer's Guide** (shown at the end of this manual).
3. Once commissioning is complete, the Host will receive an invitation from VendElectric to set up their Back Office.
4. Engage with the customer to install the VendElectric application to their smartphone or similar device from either the **App Store** for Apple devices or from **Google Play** for Android devices.
  - The application is also accessible on almost any device with a web browser.  
**<https://app.vendelectric.com>**

### LED Illumination

The pedestal incorporates an amenity LED illumination lamp which activates in response to changing light levels.

1. Cover the light sensor, located on the side of the pedestal, the lamp should illuminate.
2. Uncover the light sensor and the lamp should switch OFF.

**NOTE:** To prevent flickering in frequently changing light conditions such as headlights or shade from passing vehicles, the lamp has a built-in delay before it switches on / off.

### After Installation

Make sure this manual is given to the Host.

## Operation

**NOTE:** At the end of a charging session, always disconnect the cable from the vehicle before disconnecting from the charger.

Operating instructions for this charger are shown on the unit fascia. For more detail, refer to the **EV Driver App User Guide** included within the charger packaging.

### VendElectric EV Driver Application








The VendElectric EV Driver Application is a free download for use with smartphones running Google Android or Apple IOS. The application may be downloaded from Google Play or the Apple App Store.

Alternatively, the application can be used via a web browser.

- <https://app.vendelectric.com>

For operation of the system using the online application, please refer to the **EV Driver App User Guide** included within the charger packaging.

### Status Indicator Guide

	Flashing blue light	Socket Available.
	Flashing green light	Socket Available for 'Plug and Go' charging (optional feature to be activated by the Host).
	Fixed blue light	Cable plugged in but not charging.
	Fixed green light	Charge in progress.
	Fixed red light	Potential earth leak fault detected by the 6mA DC device.
	Flashing red light	Potential Communications Fault.
	No light	No power to the unit or the breaker within the unit has tripped and needs to be reset.

1. Make sure the status indicator shows that the unit is ready to charge.
2. Connect the charging cable to the charger.
3. Connect the other end of the cable to the vehicle
4. Use the mobile application to start the charge session.
5. Alternatively use an RFID card/fob to start the charge session.
  - The charger will issue a 'beep' sound to indicate the card has been recognised and accepted.
6. Make sure the status indicator changes to a fixed green light.

## To End a Charging Session

1. Use the mobile application to end the charge session.
2. Alternatively use an RFID card/fob to end the charging session. Or...
  - The charger will issue a 'beep' sound to indicate the card has been recognised.
3. Alternatively, remove the cable from the vehicle.
4. Once the cable has been removed from the vehicle, remove the cable from the charger.
  - Make sure the socket flap is closed when not in use.
  - Store the cable safely and in accordance with the manufacturer's instructions.

## Charging Cables and Sockets

Where possible, encourage users to behave responsibly to ensure trouble free use of the charger.

1. Charging cables should be fully uncoiled when in use.
2. Charging cables should not be stretched or place strain on the charger or vehicle connections.
3. Charging cables should be routed between the charger and the vehicle so as not to cause an obstruction or trip hazard.
4. Charging cables must NOT be left connected to the charger when not in use.
5. Charging cables should be removed from the vehicle first, and then removed from the charger.

### **CAUTION: Equipment Damage**

This charger includes a cable locking device (Hatch Lock) to reduce the opportunity of cable theft. The lock is engaged when the charging session is started and is disengaged when the charging session is ended.

Attempting to remove the cable from the charger before the session is ended or before disconnecting the cable from vehicle, may cause the lock to become permanently engaged and prevent removal of the cable.

6. Charging cables should be stored in a dry, undercover location when the cable and plug cannot be damaged or become contaminated.
7. Charging socket covers (flaps) should be closed after use.
8. Damage to charging sockets should be inspected by an appropriately qualified engineer and the charging pedestal should be electrically isolated if damage affects safety.

## Maintenance

**NOTE:** In the event of a hardware issue, always contact your installer first.

- If damage has been sustained to communications devices and/or other 'Smart' components, it is recommended that an approved Rolec installer is called to perform the repair.
- Damage caused to the equipment by misuse, lack of maintenance, inappropriate maintenance or modification is not covered by the manufacturer warranty.

EV equipment operators should have a Site Maintenance Plan that considers the type, frequency and intensity of use of the equipment on site, and which schedules maintenance as appropriate to keep the equipment in good working order.

EV charging equipment should be included in the electrical element of the site maintenance plan and must be performed by an appropriately qualified electrical engineer in accordance with applicable regulations for the region of use.

A typical maintenance (inspection and testing) schedule is provided on the next page. This schedule alternates on a quarterly basis between a shorter and longer series of steps but the frequency of which this work is performed must be determined in line with the operator's Site Maintenance Plan.

- Failure to properly maintain the charger will invalidate the warranty.

## External Cleaning and Inspection

Depending on the working environment, external cleaning and inspection may be required more regularly than other maintenance tasks:

1. Clean the external surfaces of the equipment with a damp cloth.

### **CAUTION: Equipment Damage**

To avoid damage to the surface finish, and/or internal components do NOT use:

- Abrasive materials.
- Mineral or petroleum solvents / degreasers.
- Hose pipes, Jet washers or Steam cleaners.

2. Regularly inspect the exterior of the equipment for visual damage.
  - If damage affects safety, isolate the equipment and prevent its use until appropriate repairs have been completed.
3. If required, remove any debris from around the charging socket.

## Suggested Inspection and Testing

A record or inspection, testing and maintenance should be kept and may be required to support any claims within the warranty period.

### 1<sup>st</sup> and 3<sup>rd</sup> Quarter

#### External Visual Inspection:

- Check for physical damage.
- All warning labels present and legible.
- Status Indicators operating and displaying correct status.
- If installed, check the condition of the charging socket, contacts and socket flap.
- If installed, make sure the access/cable lock is operational.

#### Internal Visual Inspection:

- Check for physical damage.
- Visual inspection for any heat degradation.
- No foreign bodies or other contamination present.

#### Clean the enclosure.

### 2<sup>nd</sup> and 4<sup>th</sup> Quarter

#### External Visual Inspection:

- Check for physical damage.
- All warning labels present and legible.
- Status Indicators operating and displaying correct status.
- If installed, check the condition of the charging socket, contacts and socket flap.
- If installed, make sure the access/cable lock is operational.

#### Internal Visual Inspection:

- Check for physical damage.
- Visual inspection for any heat degradation.
- No foreign bodies or other contamination present.

#### Electrical:

- Make sure wires/terminals are secure.
- Check Voltage and Polarity.
- Check operation of RCDs and RCBOs.
- Test earth fault loop impedance.
- Test power outlets using a load simulator.
- If illumination is installed, check that the illumination and light sensor operates correctly.

#### Clean the enclosure.

Quarterly Inspection and testing (maintenance) is recommended where charger use is frequent and/or intensive. Operators may consider increasing or reducing the maintenance frequency to level that matches the pattern of charger use but should, as a minimum, perform the tasks in the right-hand column on an annual basis.

# HOST'S GUIDE

## Getting Connected

To onboard your Roolec charging points to the VendElectric system simply follow the following steps:

### 1. PURCHASE YOUR CHOSEN PLAN

For each project you will need to:

- ✓ **Purchase** your chosen **Data Management Plan** (see table opposite).
- ✓ **Pay** any **Remote Commissioning Fees** (where applicable).

### 2. BOOK YOUR INSTALLATION

Contact your chosen Installer to **arrange a suitable date** to install your charging points.

### 3. GET CONNECTED

Once installed, your contractor will **commission and connect your charging points** on to our system.

THE FOLLOWING STEP IS ONLY REQUIRED IF YOU HAVE PURCHASED THE **PREMIUM PLAN**

### 4. BACK OFFICE MANAGEMENT SUITE

Once connected to our system, you will receive an email invitation to connect to the **VendElectric** Back Office where you can also access easy-to-follow video walkthroughs of the system, enabling you to configure, manage and monitor your chargepoints.

## IMPORTANT ADVICE

As a part of its services **VendElectric** will routinely monitor the connectivity and health of the charging points and notify the Host's nominee of any faults or connection issues that we detect. **Transitory issues can often be cleared by power-cycling and we strongly recommend that the Installer advises the Client how this can be done during the handover process.**

We also recommend that you consider entering a service and support agreement with your preferred Installer to ensure you are covered for all potential call out and eventualities.

 See the VendElectric Overview for more information [www.bit.ly/3fpkiAb](http://www.bit.ly/3fpkiAb)

For more information call **01205 725765**  
Email [support@vendelectric.com](mailto:support@vendelectric.com)  
Or visit [vendelectric.com](http://vendelectric.com)

## 3 YEAR DATA MANAGEMENT PRICING & PLANS

	Essential	Premium
<b>OZEV GRANT ELIGIBLE:</b>		
WCS (Workplace Charging Scheme)	✓ *	✓
<b>USER ACCESS:</b>		
Plug & Play Charging	✓	✓
Mobile Phone App		✓
RFID Card/Fob		✓
<b>HOST MANAGEMENT:</b>		
Unlimited Back-Office Platform Access		✓
Chargepoint Management Dashboard		✓
Visibility Of Your Entire Chargepoint Network		✓
Real-Time, Historical & Analytical Feedback		✓
Customisable Tariffs		✓
Optional Revenue Stream**		✓
Private, Public & Fleet Charging Options		✓
Exportable Usage, Revenue & BIK (Benefit In Kind) Data		✓
Automatic Maintenance Response Notifications		✓
Electrical Load Management*** (Optional)		✓
	<b>£50</b> per 3 Years (each socket)	<b>£135</b> per 3 Years (each socket)

### PRICING EXAMPLE:

#### 3 YEAR ESSENTIAL PLAN

UNIT TYPE	DESCRIPTION	QTY	PRICE (£)	TOTAL (£)
1way Charging Unit	Essential Plan Data Management Fees (per socket)	1	50.00	50.00
	1way Unit GPRS SIM	1	45.00	45.00
2way Charging Unit	Essential Plan Data Management Fees (per socket)	2	50.00	100.00
	2way Unit GPRS SIM	1	65.00	65.00

#### 3 YEAR PREMIUM PLAN

UNIT TYPE	DESCRIPTION	QTY	PRICE (£)	TOTAL (£)
1way Charging Unit	Premium Plan Data Management Fees (per socket)	1	135.00	135.00
	1way Unit GPRS SIM	1	45.00	45.00
	Remote Commissioning (per unit)	1	30.00	30.00
2way Charging Unit	Premium Plan Data Management Fees (per socket)	2	135.00	270.00
	2way Unit GPRS SIM	1	65.00	65.00
	Remote Commissioning (per unit)	1	30.00	30.00

### ADDITIONAL COSTS:

#### CONNECTIVITY

To connect a chargepoint(s) to the VENDELECTRIC network via GPRS a SIM card is required. The below costs cover the SIM card connection for a 36-month period:

- 1way OCPP unit - £45 per SIM
- 2way OCPP unit - £65 per SIM

Should you wish to have the units solely Ethernet connected, the SIM card costs above will not apply.

#### COMMISSIONING

A remote commissioning fee of £30 per unit is applicable on the premium data management plan.

Commissioning is to be carried out by the client's appointed installer with support from a VendElectric back-office representative via telephone, if required.

DC chargepoints may require on-site commissioning\*\*\*

#### OPTIONAL LOAD MANAGEMENT

Additional costs apply which are determined by the installation / site's specific requirements.

\* The VendElectric Essential management plan provides the host with an automated quarterly consumption report as required in order to meet eligibility for the OZEV Workplace Charging Scheme Grant (WCS). \*\* All revenue will be subject to a 7.5% payment processing fee which will be deducted from the host prior to payment of the agreed payment schedule. \*\*\* Subject to additional costs.



# INSTALLER'S GUIDE

## Getting Connected

### 1. HOST SIGN UP & PAYMENT

Ensure Client (the Host) has made payment for their chosen Data Management Plan & any Remote Commissioning Fees and are in possession of their '**Getting Connected**' guide available at [www.bit.ly/3nNgaPd](http://www.bit.ly/3nNgaPd)

#### What we need?

- ✓ Signed and returned Data Management Plan Agreement.
- ✓ Payment of Remote Commissioning Fees (if applicable).

### 2. INSTALL & TEST

Install the charging point/s then use the **VendElectric Install & Test Tool** and connect to our network.

For OCPP Chargepoints go to:

[installer.ocpp.vendelectric.com](http://installer.ocpp.vendelectric.com)

Username: **installer**  
Password: **inst.t3st**

For Mode 3 Chargepoints go to:

[installer.vendelectric.com](http://installer.vendelectric.com)

Username: **installer**  
Password: **inst.t3st**

#### What we need?

- ✓ Confirmed Connection to our network.
- ✓ Proof of energy output from each charging socket.
- Tip – If you don't have an EV, plug something into the 3pin socket on your EV ChargeCheck (or similar tester) to draw out some energy.

### 3. CONTACT US

Once connected and tested call **01205 725765** from the installation site to arrange the **Back-Office connection\*** and remote commissioning service.

*\*Back-Office connection is only included if the Host has opted for the Premium Data Management Plan.*

#### What we need?

- ✓ Host Details.
- ✓ Site Names and Locations.
- ✓ Charging Point ID Numbers.
- ✓ Feed Capacity to Sites and Charging Points (For load managed projects).

### 4. COMPLETE

The Host will receive an email invitation to connect to the **VendElectric** Back Office where they can also access easy-to-follow video walkthroughs of the system, enabling users to configure, manage and monitor their chargepoints.

### RECOMMENDATIONS

As a part of its services **VendElectric** will routinely monitor the connectivity and health of the charging points and notify the Host's nominee of any faults or connection issues that we detect. **Transitory issues can often be cleared by power-cycling and we strongly recommend that you advise your Client how this can be done during the handover process.**

Rolec equipment is covered by a parts warranty, however we recommend that you consider offering a service support agreement to your Client to ensure they have appropriate cover for all potential call out eventualities.

For more information call **01205 725765**  
Email [support@vendelectric.com](mailto:support@vendelectric.com)  
Or visit [vendelectric.com](http://vendelectric.com)

[illegible]



THE UK'S LEADING MANUFACTURER OF **EV CHARGING POINTS**



**ROLEC**  
*EV Charging*

t: 01205 724773

e: [enquiries@rolecserv.co.uk](mailto:enquiries@rolecserv.co.uk)

[www.rolecserv.com](http://www.rolecserv.com)