

Pod Point Twin Unit Installation Guide

This guide is intended for use by competent electrical installers with the necessary experience to carry out the installation in accordance with the local applicable regulations and legislation.

Introduction

Pod Points are designed to give a long and reliable service life. However, the operational reliability depends on a number of installation factors.

Before starting installation, please confirm the following:

- There is a Wifi signal available at the installation site. Failing that there should be a good GSM signal available. (please refer to 3G to Wifi guide). A suitable power source is within reasonable distance of the proposed location (consult a qualified electrician if required)
- The proposed site has been selected in order to minimise the risk of damage to the Pod Point



Fig. 1 Pod Point
Twin Unit

Note on Wifi

Pod Points communicate with a control network via a GSM/GPRS connection. To allow this, a Wifi network signal is required and must be checked at the site survey. You can check Wifi network availability on your phone when standing at the area where Pod Point is going to be installed.

Tools

Security torx bits are:

- Pin Torx T30 (upper door)
- Pin Torx T45 (lower door and ground level fixing)

Other items not supplied, but that may be required:

- M10 x 120 mm (minimum) countersunk security anchor bolts x 4 (surface mount only, suitable or local substrate)
- 5 mm steel (for stabilising subterranean foundation during installation only)
- Feeder Pillar

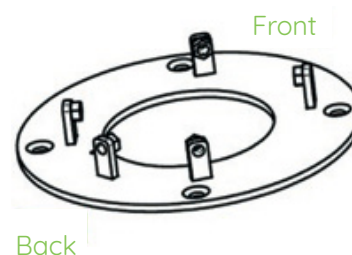
Civil Work

The surface mounting foundation adapter can be used to secure the POD Point to existing concrete (or similar) surfaces, or to a purpose laid 600 x 600 x 150 mm concrete pad. Cable entry subterranean or surface mounted.

The surface mounting plate is secured to the ground using four M10 x 120mm minimum expanding countersunk concrete anchor bolts (or preferred equivalent fixing).

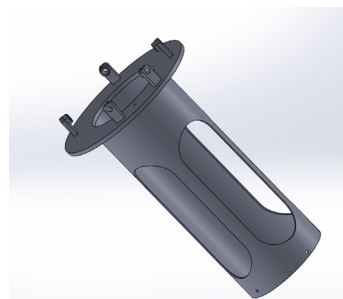
You can see on figure 2 where the front of the post will be located.

Fig. 2 Surface Mount



The Subterranean Foundation adaptor (fig. 3) is typically set in 0.6 x 0.6 x 0.45m of PAV1 S2 Slump concrete and is designed to accept subterranean cables which are buried 450 mm below the surface. The cable enters the foundation through a standard 32-75mm Rigiduct.

Fig. 3 Subterranean Mount



It is very important that the foundation is level in all axes, as this controls the angle of the POD Point. It is also very important to orientate the foundation correctly, as this controls the orientation of the POD Point. If required, it is possible to stabilise the subterranean foundation by inserting suitable lengths of 5/6mm rods through pairs of holes at the top of the unit. Ensure that the underside of the mounting plate

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sits on the terrain's surface, failure to do this may result in difficulty in fitting and removing the access door.

Obstructing the pavement location of the POD Point and signage - in no circumstances should the width of a public footway be restored to less than 1m, preferably not less than 1.5m.

Electrical Work

Single Phase:

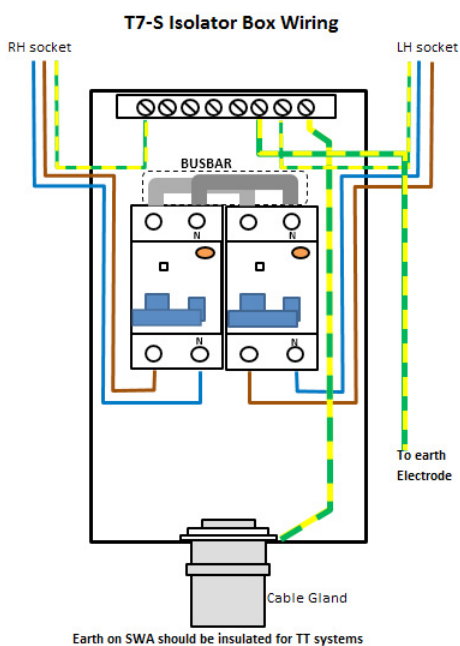
Each POD Point ideally needs 240V AC at 32A (two phases) or 64A (single phase).

Each side of the POD can supply 32A per door, either fed from an 80A single phase supply, 2 independent 40A single phase supplies or 2 phases of a 3 phase supply plus Neutral (40A).

NOTE: cables used must be able to handle 40A/80A fault condition for T7-S or 20A/40A for T3-S. An RCD/ MCB/RCBO should be fitted at source and must factor in Discrimination, typically a 150~300mA timed delay version used.

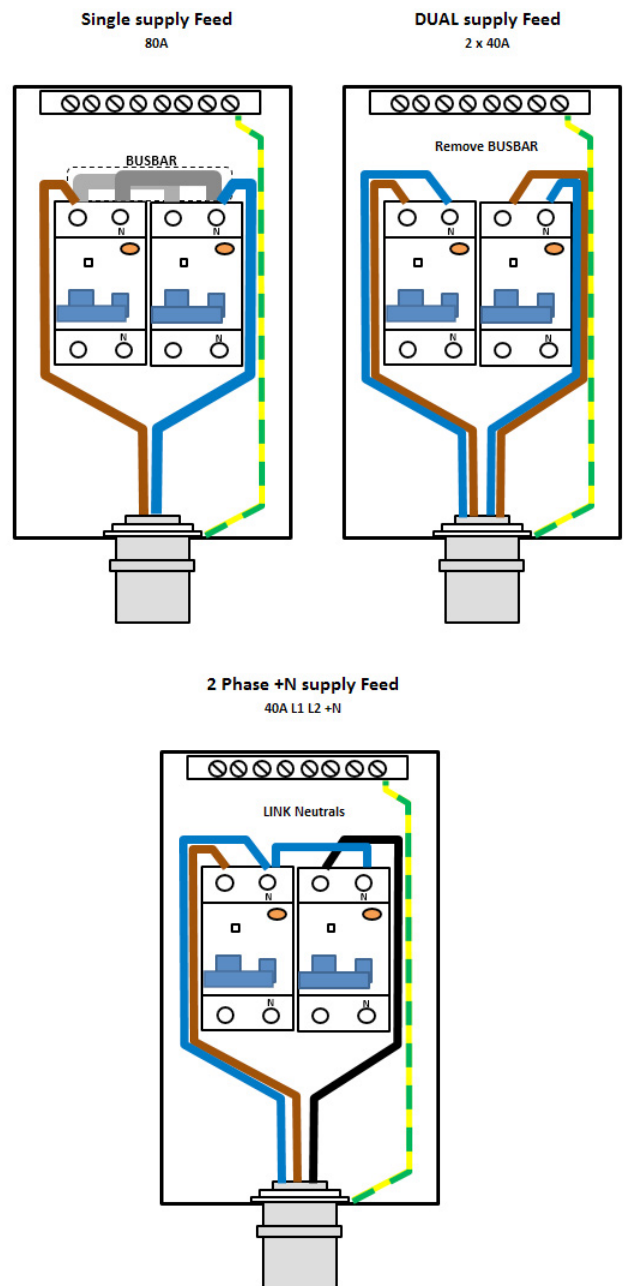
In Fig. 4, the wiring of the POD Point's isolation box, fitted inside the unit, is shown.

Fig. 4 Twin single phase unit isolater box wiring



In Fig. 5 different ways to supply the POD Point are illustrated.

Fig. 5 Different options for wiring of POD Point 1-phase unit.



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Three Phase

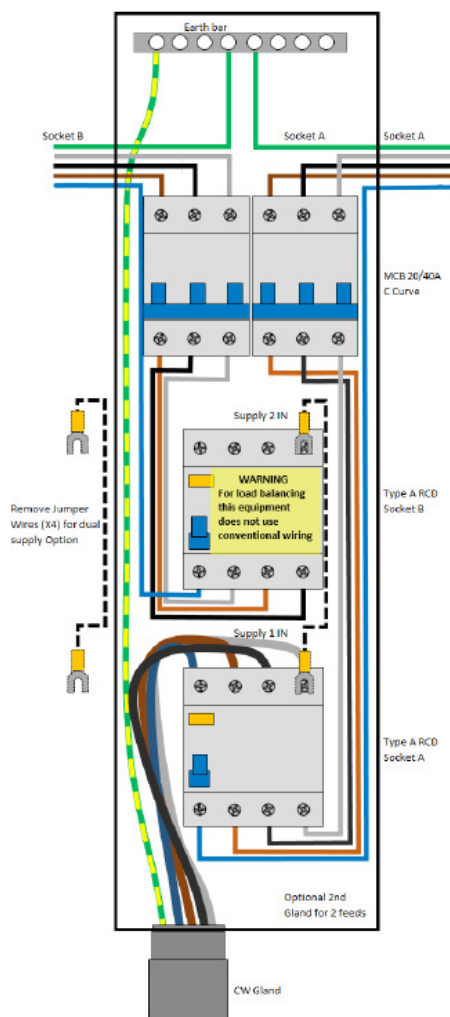
Each POD Point 3 phase unit needs 3-phase (3P+N*) 400 VAC at 100 A (32A per Phase). The unit should be provided with an 80A 400V 3 phase +N supply (Fig.6) and must factor in discrimination, typically a 150-300mA timed delay version used. An RCD/MCB/RCBO must be fitted at source. It is possible to de-rate the Point to 11kW/door (16A x 2 per phase) where the supply capability is not adequate. RCD should be of minimum Type A but Type B may be required for some specific customers. Type AC RCD's must NOT be used.

* (3P+N) : 3 Phases + neutral star network.

Note

Alternatively, the POD Point 3 phase unit can be supplied from 2x 32A supplies.

Fig. 6 Wiring of POD Point 3-phase unit.



Earth arrangements

Electric vehicle supply equipment must be installed to BS7671 regulations, Where the charger is to be installed outside as "street furniture" the same regulations apply as if it were a lighting column, a separate earth electrode is required. A separate earth electrode is required where the charge point is located inside or on a building, i.e. a multi storey car park; where this is the case the POD Point units earth should be connected to the structure of the building and therefore in the same equipotential zone.

It is the responsibility of the installer to conduct a risk assessment of electrical or metallic items in the immediate area to a range of 10 Meters of the proposed location of the POD Point unit, If an adjacent installation (within 10 meters) has a different earthing arrangement, measures must be taken to eliminate risk of electric shock to the end user if a fault were to develop (PME neutral failure for instance). The POD Point earth shall be independent from the distributors earth system with no direct connection to the incoming supply. The SWA protective cover should be connected to the buildings structure or main earth, in almost all other installations the SWA should be insulated from the POD Point unit.

The electrical installer shall install a suitable copper rod electrode complete with appropriate CSA cable, termination housing and covers where appropriate. Earth/neutral impedance should be less than 150ohms (less than 100 preferred), POD Point unit earth to rod impedances should be less than 1ohm.

Notes

- An additional earth wire/eyelet is provided to earth the ground fixing plate
- During fixing of the rear door ensure it is earthed using the provided cable/screw

Connecting to Wi-fi network

On power up of the POD Point Solo the LED's on the front should illuminate white.

To connect the unit to a Wi-Fi network:

Obtain the site's Wifi network SSID and WiFi password key (usually found on the WiFi router):

1. Switch 1 side of the Twin unit on, by turning on 1 out of 2 RCBO's, while the other one is turned off.
2. Scan for podpoint Wi-fi network on a mobile device and connect to it.
3. Open the web browser and type the ip address: 192.168.1.1 followed by enter.

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4. Complete the following information on the page displayed on the device:
 - a. SSID name of the network the Pod Point Twin Is to connect via:
 - b. Type of encryption of this Wi-fi network.
 - c. Password of this Wi-fi network.
5. Press "Add" button located at the bottom of the web page.
6. Power cycle the Pod Point Twin and wait for 1 minute.
7. Follow the same procedure to connect the second side of the Twin unit to the Wifi.

Light should go blue with a short magenta flash. If the LED remains white, you may need to power cycle the unit again and verify the settings.

NOTE: the Pod Point connects to a secure server, all data is encrypted using a unique algorithm.

Commissioning of Twin Unit

Visit the PP Install App to commission this unit. If you do not have access to the App, see " Note for Commissioning".

Note for commissioning

If you do not have access to the app, please text the details listed below to this phone number: 07805 888 545

- Site operator's name
- Site operator's email address
- Site operators phone number
- Location of the unit
- Name of the unit (e.g. John-Mary)
- PG-number of the unit (e.g.: PG-90001)

Testing of Functionality

When power is turned on, lights on both sides of POD Point unit should change colours as follows:

1. Trying to get signal (takes up to 1 min) - White
2. Establishing communication with server - Magenta
3. Communication established, car not plugged - Blue with flashes of magenta

Test gun should then be plugged in to both sockets and unit functionality should be tested as follows:

1. Unlock mode - Blue with magenta flashes
2. Standby hi/low - Flashing green

3. Change hi/low - Green
4. Fault - Red with red flashes

If the test procedure fails at any stage please contact POD Point.

Contact Us

If you have any questions, comments, or issues regarding POD Point Products which are not covered by this installation guide, please contact our customer support team. You may be asked to provide the serial number of your POD Point Solo (See Fig.8). As part of our quality and training programme calls may be recorded or monitored.

Customer Support

Telephone: 020 7247 4114

E-mail: support@pod-point.com

Web: www.pod-point.com

