ePod and Home Pro

Installation Guide

[1 phase 7.4kW]

[V1.0]



OHMEX1GB003-BL /
EP0-07GB-WB-BLSTD-01



OHME0002GB002
and **OHME0002GB002-8M**
HP5-07GB-WB-BLSTD-01 /
HP8-07GB-WB-BLSTD-01

Scan to
view installer
resources


Home Pro 3

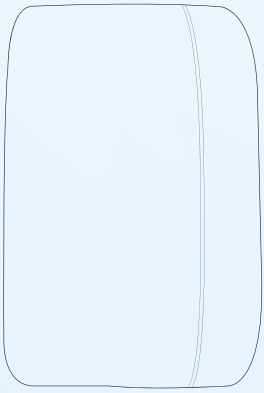

ePod 29

Width: 200mm



Height: 170mm

Depth: 100mm



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1. Safety Precautions

This document contains important safety information relating to your Ohme Home Pro charger.

Please retain this document for future reference.
Please read the document fully before using the Ohme Home Pro.
Not following the safety instructions can result in electric shock, fire, serious injury or death.



The charger should be inspected periodically to check for damage to the cabling and the enclosure. Do not use if the product is defective or appears damaged. Contact the Ohme Helpdesk for advice



Do not attempt to open, repair, tamper or modify the Ohme Charger in any way. There are no user-serviceable parts



We strongly recommend that a competent person (e.g. qualified electrician) installs and/or inspects the installation to check for safety and supply adequacy before use



The overall installation should be in accordance with the Wiring Regulations and Code of Practice for Electric Vehicle Charging Equipment specific to your territory, see the 'Compliance' section in the guide for specific territory requirements



Handle the Ohme Home Pro with care. Do not expose any part of the unit or cable to severe forces, impact or sharp objects.



The Ohme Home Pro is only intended for vehicles that do not require ventilation during charging (NB all mainstream electric vehicles do not require ventilation)



You may clean the Ohme Home Pro with a soft damp cloth.
Do not use solvents or abrasives.

2. Welcome to Ohme

This guide contains everything you need to install the charger and get started on the Ohme app. If you need more information, see the 'Help Desk Contact Information' section in this guide.

Product description

- The Ohme Home Pro is an Electric Vehicle (EV) charging device.
- All Ohme Home Pro units are tethered, which means the cable cannot be removed.
- The charger is to be used with a single-phase electricity supply.
- Please read the Product Specifications below related to your product model.
- The product conforms to the latest safety standards shown in the 'Compliance' section.

Installer information

Make a note of the charger's serial number, this is important if the customer needs to contact the Ohme Helpdesk.

Serial Number

Ohme								

Installer:

Name/Company:

Contact Number:

Installation Date:

3. Product Specifications

Check your model variant before following the product specification.

Home Pro 1 PHASE – UK MODEL ONLY	
What's in the Box	Ohme Home Pro and backplate 1x CT clamp 2x Wago clips and connector block Cable holster Hardware fixings for installation
Voltage	230 V AC
Frequency	50 Hz
Max Current, Power Output	32 A, 7.4kW
Operating Temperature	-25 ºC to 45 ºC
Storage Temperature	-40 ºC to 85 ºC
Cable length (output - vehicle)	5 metres or 8 metres (Model dependant)
Cable length (input - supply)	1 metre
Electrical Connection	One metre fixed input cable/flying lead requiring termination on site to a suitable junction box, isolation switch or mini-CU (not supplied). The flying lead conductors are 6mm2copper, the overall diameter is 15.2mm, suitable for a No. 6 cable cleat.

Residual current function (RCD)	The RCD in the unit is certified as an RCD-DD, conforming to IEC62955, this has a 30mA Type A characteristic with 6mA DC. It is usually required to install an upstream RCD dependant on your local regulations in your territory. Any upstream RCD must be at least Type A 30 mA.
PEN fault detection	The Ohme Home Pro has an in-built PEN fault detection function and conforms to 722.411.4.1 (iv) of BS7671 18th edition. After activating PEN, the car will not reconnect to the vehicle for 5 minutes.
Overcurrent protection	Overcurrent protection to be fitted separately as part of installation. We recommend a 40A Type B MCB.
CT Clamp (s)	Can be fitted in any orientation between the 'Electricity Meter' and 'Main Fuse Box'. Ideally as close as possible to the Electricity Meter.
Ingress Protection	IP55 (suitable for use outdoors in all weather
Impact Protection	IK08
Data Communication	2G / 3G / 4G
Shipping weight	5.3 kg (5 metre), 6.5kg (8 metre)
Colour	Black

Home Pro 1 PHASE – UK MODEL ONLY WIFI/BLUETOOTH VARIANT	
What's in the Box	Ohme Home Pro and backplate 1x CT clamp 2x Wago clips and connector block Cable holster Hardware fixings for installation
Voltage	230 V AC
Frequency	50 Hz
Max Current, Power Output	32 A, 7.4kW
Operating Temperature	-25 ºC to 45 ºC
Storage Temperature	-40 ºC to 85 ºC
Cable length (output - vehicle)	5 metres or 8 metres (Model dependant)
Cable length (input – supply)	1 metre
Electrical Connection	One metre fixed input cable/flying lead requiring termination on site to a suitable junction box, isolation switch or mini-CU (not supplied). The flying lead conductors are 6mm2copper, the overall diameter is 15.2mm, suitable for a No. 6 cable cleat.

Residual current function (RCD)	The RCD in the unit is certified as an RCD-DD, conforming to IEC62955, this has a 30mA Type A characteristic with 6mA DC. It is usually required to install an upstream RCD dependant on your local regulations in your territory. Any upstream RCD must be at least Type A 30 mA.
PEN fault detection	The Ohme Home Pro has an in-built PEN fault detection function and conforms to 722.411.4.1 (iv) of BS7671 18th edition. After activating PEN, the car will not reconnect to the vehicle for 5 minutes.
Overcurrent protection	Overcurrent protection to be fitted separately as part of installation. We recommend a 40A Type B MCB.
CT Clamp (s)	Can be fitted in any orientation between the 'Electricity Meter' and 'Main Fuse Box'. Ideally as close as possible to the Electricity Meter.
Ingress protection	IP55 (suitable for use outdoors in all weather)
Impact Protection	IK08
Data Communication	Customers Household Wifi - IEEE 802.11b/g/n-compliant, supports 20 MHz, 40 MHz bandwidth in 2.4 GHz band and Bluetooth
Shipping weight	5.3 kg (5 metre), 6.5kg (8 metre)
Colour	Black

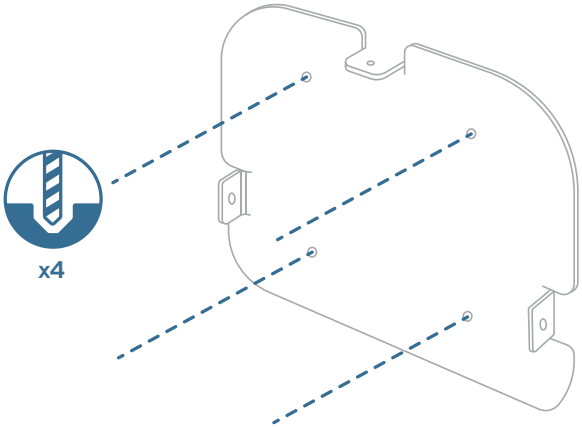
4. Electrical Installation Guide - 1 Phase

The Ohme Home Pro is a single-phase device with five input connections – Earth, Neutral, Live and two current sensor inputs. The Ohme Home Pro has a dynamic load balancing feature.

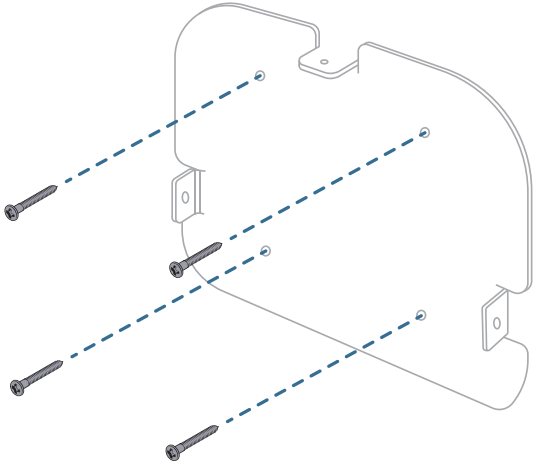
1. Find a suitable location for the Home Pro charger and affix the junction box onto the wall.

Note: Junction box must be installed either at ankle height or the input cable fed through a wall and terminated on the other side.

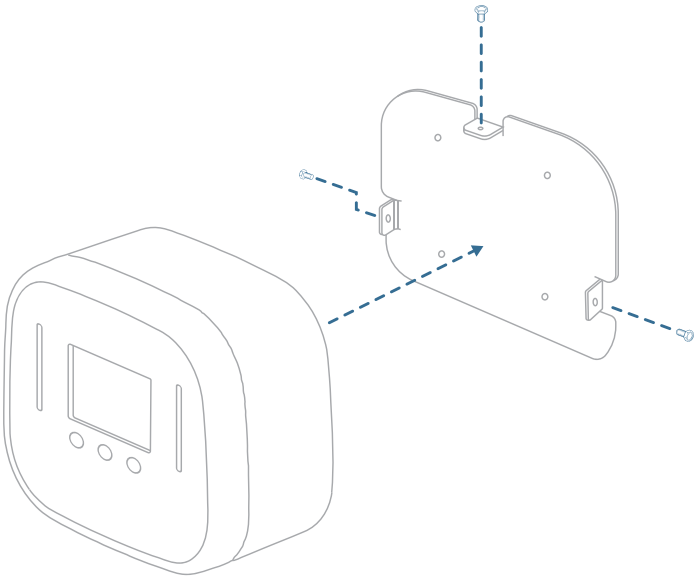
2. Using the back plate as a template, drill 4x holes with a 7mm drill bit.
Insert wall plugs.



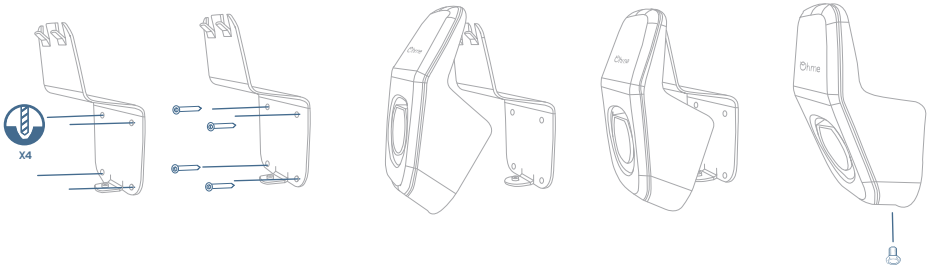
3. Secure Ohme Home Pro back plate to a flat wall.



4. Secure Ohme Home Pro charger to back plate using the three securing screws on the top and sides.



5. Secure Holster to a flat wall in a suitable location.



6. Secure junction box and connect three-core cable using appropriate glands. Leave junction box unterminated in a safe condition.

7. Run flying lead from the Home Pro into fixed junction box and terminate three cores from the power cable and the fly lead.

8. -

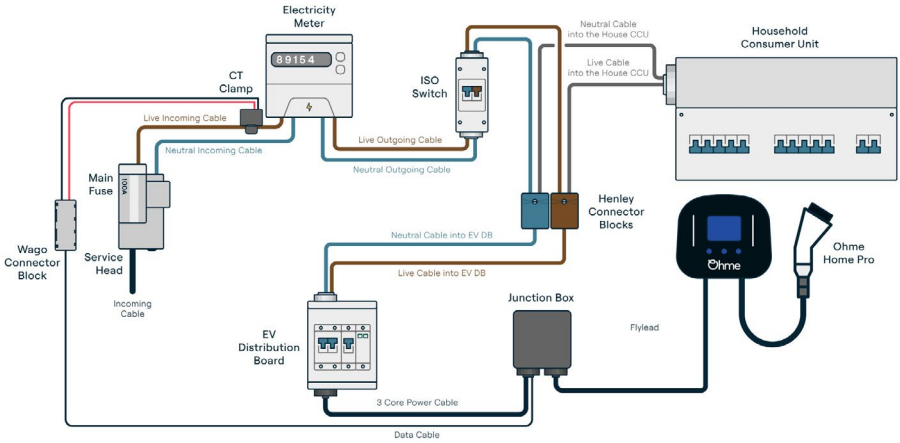
- Place the CT clamp provided on first incoming live cable. **Can be fitted in any orientation between the 'Electricity Meter' and 'Main Fuse Box'. Ideally as close as possible to the Electricity Meter.**
- Using Wago connectors provided, connect the data cable to the CT clamp.
- Connect Data Cable to clamp connections within the junction box.
- **NOTE: Data Cable can be Ethernet, Twisted pair, Belden cable and up to 60m in length.**

9. Fix Wago box in suitable location and securely clip cover into place.

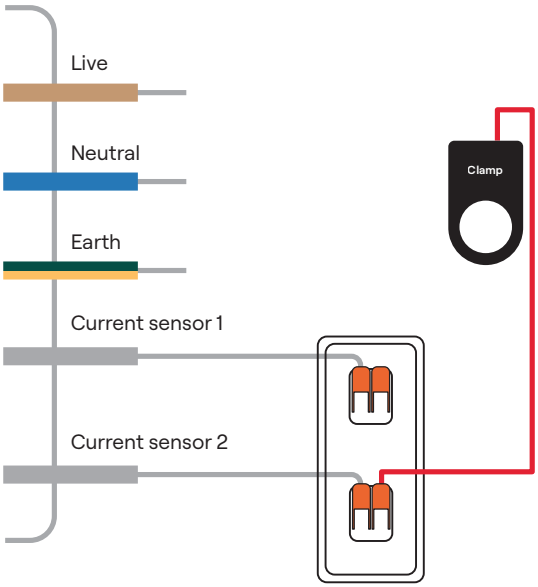
10. Turn power back on.

5. 1 Phase CT Clamp Overview (7kW)

UK 1 PHASE



CT Clamp Overview (7kW)



6. Electrical Installation Features

Junction Box:

Junction box must be rated to at least 32A, have sufficient IP rating for the location and space for a three-way terminal block (no load balancing) or five way terminal block (with load balancing).

Junction box must be installed either at ankle height or the input cable fed through a wall and terminated on the other side.

Installer should select a suitable, high quality, termination method. Where a terminal block is used that has a screw directly pushing against the conductor, it is essential that the screw clamps onto the bootlace ferrules, not directly onto the copper. The flying lead is supplied with bootlace ferrules.

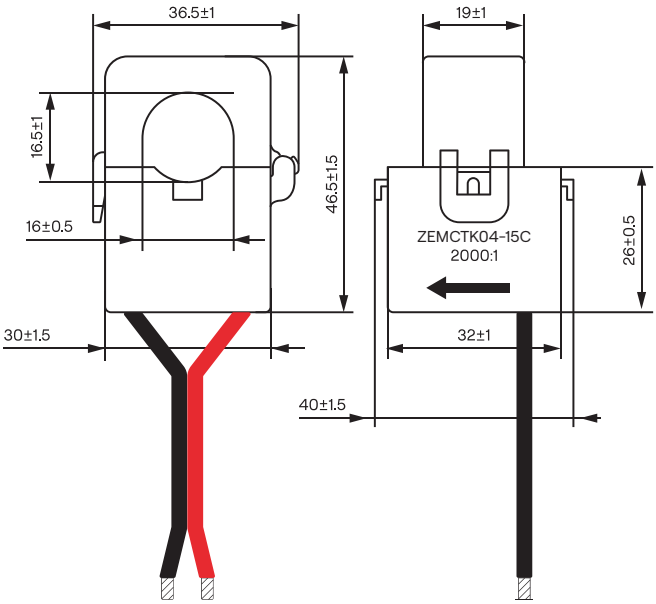
CT Clamps:

Connect the current sensor inputs to the CT clamp, you will likely need to extend the cable.

The CT clamp and wiring is not polarity sensitive – you can install the CT clamp in either direction.

CT clamp is provided to measure the electrical demand of the property, or sub-board. The unit will limit the maximum current available to the vehicle to keep the household demand below the set threshold/fuse value. CT clamp operating range is 0 - 50A.

Where load balancing has been installed and activated, and if the CT clamp is removed, or is faulty, the unit will revert to 16A. It is therefore sensible to ensure the spare capacity, after taking account of other loads and diversity, is at least 16A.



Operating Range	0 - 50A
Accuracy	0.1 [@Ipr=20A]
Output Current	0-25 mA
Turn	2000/1
Load Resistance	20Ω

Important Installation Notes:

NOTE: Where the dynamic available capacity for the charger drops to below 6A, the Ohme Home Pro will pause the charging for at least five minutes to prevent rapid switching of the vehicle where the current is hovering above and below the threshold.

NOTE: The supplied WAGO lever connectors are for the load balancing clamp only and must not be used for the main supply connections as they are not appropriately rated.

NOTE: The CT clamp and wiring is not polarity sensitive – you can install the CT clamp in either direction.

7. Commissioning and Installer Mode

Before commissioning, you should have received an email from Ohme with the credentials to log in into your Installer Web App.

Please contact your Ohme representative to retrieve these. Please see 'Help Desk Contact Details' for more information.

Commissioning via Installer Web App

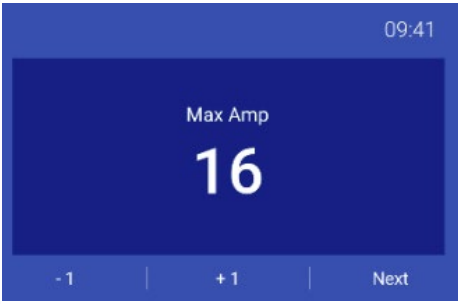
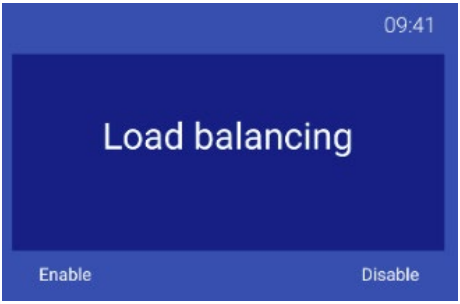
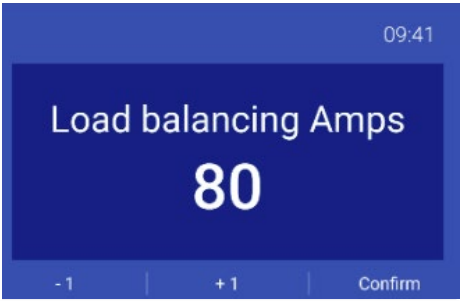
1. Access the 'Installer Web App' from the mobile/tablet or computer using the login credentials.

2. Enter the Serial Number of the charger by scanning the QR code or inputting manually.

3. Enter the configuration page of the charger:

- Click on take reading to check that the CT clamp has been installed correctly.
- Set the Max charge current. This will be set to 32A by default, use the '+' and '–' buttons to increase or decrease the amperage output. When finished tap the right button to continue.
- Enable the Load balancing.
- Set the Load balancing threshold
- Click on "Apply settings"

8. Commissioning via Home Pro LCD Screen

Upon powering the Ohme Home Pro for the first time, the Ohme logo will appear.	
The Installer Mode will allow you to set the maximum output of the charger.	
Load balancing can be enabled or disabled using the touch controls. **NOTE: If no CT clamp is installed, Load balancing should be disabled. Enabling Load balancing without a CT clamp will mean the charger output is capped at 16A.**	
If Load balancing is enabled, set the Load balancing threshold. For a standard installation, this value should be the tripping value of the mains protection.	

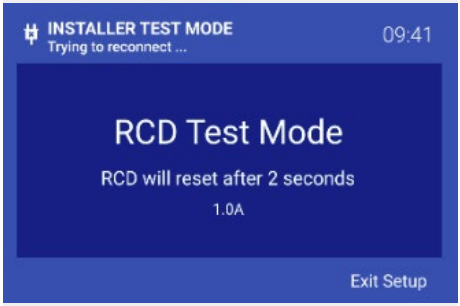
RCD Test Mode. The RCD will reset after 2 seconds. When Load balancing is enabled and a CT Clamp has been attached, you will also see the CT Clamp reading.

In this example you can see the reading is 1.0A.

To test that the internal RCD is working, use an EV tester to simulate RCD leakage to trip the RCD. Vehicle must disconnect.

Note: In the event of an RCD activation in the Ohme charger, the unit can be reset by power cycling (switch the supply off, wait 5 seconds, and switch on) or by unplugging and re-plugging the vehicle.

Note: If you can't get a reading, try boiling a kettle or using another high-powered appliance as this can help record a reading.



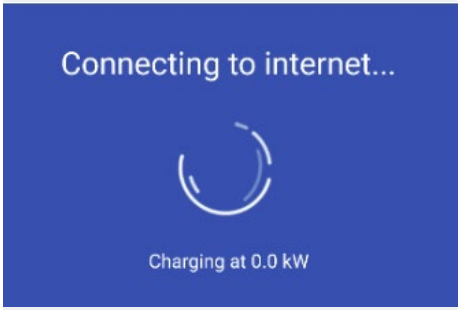
Once the Installer Mode setup has been completed, the charger will either:

- Network Product Only: Establish a connection to the internet. Once a connection to the internet has been established, the charger will connect to the Ohme server.

OR

- Wifi Product Only: Be ready for Wifi connectivity.

Once a connection to the internet has been established, the charger will connect to the Ohme server.



If no signal is found, the charger will exit installation automatically exit with no connection, and user will not be able to pair their app.

NOTE: See Connectivity section for further details.

NOTE: If the charger has previously established a connection, this screen will be skipped.

A QR code will be displayed when the charger is ready to be linked

to a customers' Ohme account. During the account setup the

customer can use their device camera to 'scan' the QR code and link the account with the charger.

The charger serial number is displayed beneath the QR code, and on the underside of the unit if required.



NOTE: Installer mode must be disabled before leaving the site.

Pairing the Customer

Installer does not need to be present.

The Customer downloads the app and follows the instructions to pair.

GET IT ON Google Play

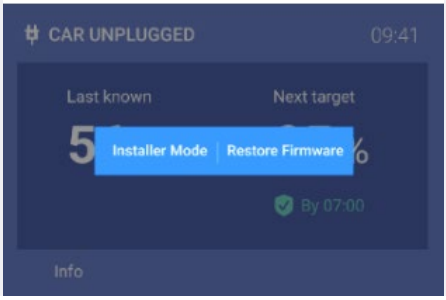
Download on the App Store

9. Re-entering Installer mode

To enter the installer mode, ensure the charger is unplugged from the car and place a finger on all three buttons at the same time for 10 seconds. Two pink lights will appear while you're holding down.



After 10 seconds the following options will appear. To enter the Installer Mode touch and hold your finger on the left button, corresponding to the side of the option on screen.



Hold your finger down for 3 seconds, the text will turn yellow to confirm, and the charger will reboot into installer mode.



10. Connectivity

Network Products Only

Ohme chargers use a pre-configured 4G data connection and relies on a mobile phone connection for the smart features.

Where it is known to be unreliable the customer should be made aware that the smart features of the charger will also be unreliable. Ohme cannot be held responsible for the installation location and issues with the public mobile phone network.

Where the unit cannot establish data transfer at the time of plug in, the unit will behave like a dumb charger and will not schedule the charging session.

Wifi & Bluetooth Products Only

If using Wifi -

To connect to Wi-Fi, the customer will need to use the Ohme App and send their Wi-Fi password to the charger via Bluetooth.

You can still commission the charger without a Wi-Fi connection using the controls on the charger, but if you use the 'Ohme Installer Portal' to commission the charger the customer will first need to connect the

charger to a Wi-Fi network for the installer portal to communicate with the charger.

How the customer connects to the charger with a Wi-Fi network:

1. Download the 'Ohme app' from the Apple App Store or the Google Play Store.
2. Create an account and start the onboarding process in the app.
3. Link the charger in the app to enter the Wi-Fi connect journey.
4. Connect to the charger via Bluetooth by granting the Ohme app permissions to access the phone's Bluetooth and Location.
5. Select the Wi-Fi network you want to connect to from the list of Wi-Fi networks the charger has found. NOTE: Only Wi-Fi networks with 2.4Ghz can be selected.
6. Enter the password for the Wi-Fi network selected.
7. Press connect charger.
8. The charger should now have the correct Wi-Fi credentials and password saved.
9. Unplug the device for 30 seconds. Plug it back again.
10. Once plugged in, the charger should go online withing 70 seconds. (The orange light indicator should stop blinking).

If using Bluetooth -

Bluetooth allows the customer to link the Ohme Home Pro charger to the Ohme app, if Wi-Fi connectivity is not available/reachable.

This feature also offers the ability to unlink charger, approve a plug in, and ability to lock/unlock the chargers' buttons.

11. Compliance

V1.3			Germany	France	Austria	Norway	Sweden	Denmark	Netherlands	Belgium	Spain	Italy	Portugal	Greece	Ireland	UK	Australia	New Zealand	USA	CAN
Electrical Safety		Legal	VDE 0100	NF C15-100	OVE/ÖNORM E 8001	NEK 400:2018	SS 436 4000:2017		NEN 1010:2020	GREI 2020	REBT-2002	CEI 64-8:2019	RTIEBT Ordinance No. 949-A/2000	Law 4483/1965 (A' 118)	IS 10101:2020	BS7671:2018 Amendment	AS/NZS 3000:2018		NFPA 70	CAN C22.1
			UTE C15-7-722													S.I. 2016/1101				
			LVD - 2014/35/EU																	
		Standard	IEC 61557-12:2018																	
			IEC 61851-1:2019																	
			IEC 62955:2018																	
			IEC 62196-1																	
			IEC 61851-22																	
			IEC 62196-2																	
			IEC 60364:																	
			HD 60364:2020																	
			EN 62752:2016+A1:2020																	
																	AS/NZS 3820			
																	AS/NZS 4417.2			
																	AS/NZS 60335.1			
																	AS/NZS 60898			
																	AS/NZS 61009			
																	AS/NZS 60947			
Product Codes	HP5	OHME0002GB002													X	X				
	HP8	OHME0002GB002-8M													X	X				
	EP0	OHMEX1GB003-BL													X	X				
	Go CMD	OHME0402GB001	X		X	X	X	X	X	X	X	X	X	X						
	Go Shuko	OME0702EU001	X		X	X	X	X	X	X	X	X	X	X						
		EP0-07EU-4G-BLSTD-01	X		X	X	X	X	X	X			X	X						
		EP0-07EU-DU-BLSTD-01	X		X	X	X	X	X	X			X	X						
		EPS-07EU-4G-BLSTD-01		X								X								
		EPS-07EU-4G-BLLIN-01		X																
		HP5-07EU-4G-BLSTD-01	X		X	X	X	X	X	X	X	X	X	X						
		HP8-07EU-4G-BLSTD-01	X		X	X	X	X	X	X	X	X	X	X						
		HP5-11EU-4G-BLSTD-01	X		X	X	X	X	X	X	X		X	X						
		HP8-11EU-4G-BLSTD-01	X		X	X	X	X	X	X	X		X	X						
		HP5-11EU-4G-BLDEL-01								X										
		HP8-11EU-4G-BLDEL-01								X										
		EP0-11EU-4G-BLSTD-01	X		X	X	X	X	X	X	X		X	X						
		HP5-07EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		HP8-07EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		HP5-11EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		HP8-11EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		HP5-11EU-4G-BLMID-02	X																	
		HP8-11EU-4G-BLMID-02	X																	
		EP0-11EU-4G-BLMID-01	X		X	X	X	X	X	X	X		X	X						
		EPS-11EU-4G-BLMID-01		X								X								
		EP0-07EU-4G-BLMID-01	X		X	X	X	X	X	X	X		X	X						
		EPS-07EU-4G-BLMID-01		X								X								
		EP0-07AU-WI-BLSTD-01															X	X		
		HP5-07AU-WI-BLSTD-01															X	X		
		HP8-07AU-WI-BLSTD-01															X	X		
		EP0-22EU-4G-BLSTD-01	X		X	X	X	X	X	X	X		X	X						
		EPS-22EU-4G-BLLIN-01		X								X								
		EP0-22EU-WI-BLSTD-01	X		X	X	X	X	X	X			X	X						
		EP0-22EU-4G-BLMID-01	X		X	X	X	X	X	X	X		X	X						
		EPS-22EU-4G-BLMID-01		X								X								
		EPS-22EU-WI-BLLIN-01		X																
		HP5-09US-4G-BLSTD-01																	X	X
		HP8-09US-4G-BLSTD-01																	X	X
		HP5-07GB-WB-BLSTD-01													X	X				
		HP8-07GB-WB-BLSTD-01													X	X				
		EP0-07GB-WB-BLSTD-01													X	X				
		EPS-07GB-4G-BLSTD-01													X	X				
		HP5-07EU-4G-BLSHU-01							X	X	X	X	X							
		HP8-07EU-4G-BLSHU-01							X	X	X	X	X							

12. Disposal for Users of Waste Electrical & Electronic Equipment (WEEE)



This symbol is only valid in the EU. This symbol on the product and documentation means that used electrical and electronic products should not be mixed with general household waste.

For disposal, proper treatment, recovery and recycling, please take this product to designated collection points, or contact your local authorities or dealer and ask for the correct method of disposal.

13. Help Desk Contact Information

	Address	Email	Telephone
UK	Ohme Operations UK Ltd 125-130 Wellington House, The Strand London WC2R 0AP	ohme-ev.com/support	+44 (0) 20 3375 1586
IRELAND	Ohme Technologies Ltd Unit 74, Penrose Wharf, Penrose Quay Cork Ireland T23 HF51	ohme-ev.com/ie/help	+353 21 601 0311

UK & Ireland Manufacturer's Warranty Only (V1.0)

The key terms of the warranty for the Ohme Home Pro are as follows

- The device is protected by a manufacturer's warranty for 36 months from the date of installation. This covers parts and labour
- The minimum operational life of the Ohme Home Pro exceeds 36 months
- The warranty covers on-site assistance, repairs and replacements, at no cost

The warranty covers any defects in materials or workmanship under normal use. During the warranty period, Ohme will refund, repair or replace, at its discretion, at no charge, products or parts of the product which prove defective because of improper materials or workmanship under normal use and maintenance. This will include labour costs to repair or replace the unit at the installation site.

Ohme will either repair the product using new or refurbished replacement parts or replace the product with new.

A replacement product assumes the remaining warranty period of the original product or for 180 days from the date of the replacement or repair, whichever is longer.

The warranty does not cover any issues that are caused by conditions, malfunctions, or damage not resulting from defects in the charging unit. The warranty does not cover damage or malfunction directly caused by abuse, misuse, negligence, accident, improper use, including but not limited to:

- Failure to follow the instructions and warnings provided in the product literature
- The environment or "Acts of God" such as fire, earthquake, flood
- General appearance of the product such as discolouration or damage to paint, labels, scratches, dents and cracks
- Any repair, alteration or modification to the product other than those authorised by Ohme

You may have other legal rights under local laws in addition to the rights under this manufacturer's warranty. Contact Ohme in the first instance to discuss your options.

To initiate a service from Ohme under the manufacturer's warranty, please contact us by email using the appropriate contact details, see 'Help Desk Contact Details' table above. Please have the serial number of the charging unit to hand and it will help if you have the details of your installer.

Limitation of Liability

No liability will be accepted for any loss, costs or damage as a consequence of using or misusing the product except, and only to the extent, where this is caused by our negligence.

Terms and Conditions

For Terms and Conditions of the product please visit our website at **www.ohme-ev.com**

Statement of Compliance

The Electric Vehicles (Smart Charge Points) Regulations 2021

Seller name: Ohme Operations UK Ltd.

Seller address: 125-130 Wellington House, The Strand, London WC2R 0AP

Ohme Operations UK Ltd declares under sole responsibility that the following charge point models comply with the requirements set out under the Electric Vehicles (Smart Charge Point) Regulations 2021, as detailed in the Technical File (available on request).

Compliance **(including** Schedule 1: Security)

Product Family	Product Code	Description	Firmware
Ohme Home Pro	OHME0002GB002 HP5-07GB-WB-BLSTD-01	Home Pro Type 2 (5 metre)	V1.31, or any version greater
	OHME0002GB002-8M HP8-07GB-WB-BLSTD-01	Home Pro Type 2 (8 metre)	

None of the above products are sold with Demand Side Response agreements in place at the point of sale.

Signature:

Name: Daniel Hollingworth
Position: Engineering Director
Date: 1st December 2022

Statement of Compliance (from Installer or Distributor)

Seller name	
Seller address	

declares under sole responsibility that the relevant charge point,

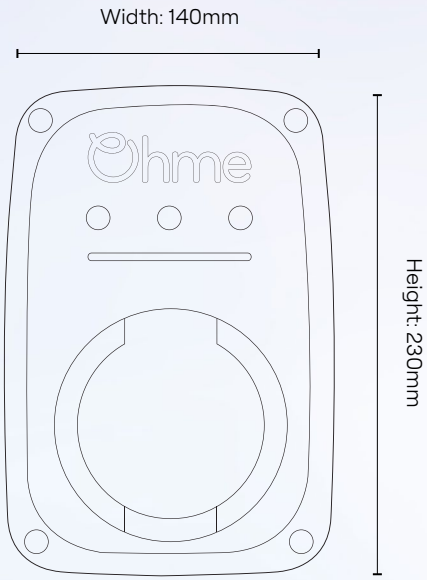
Charge point model	
Date of sale	

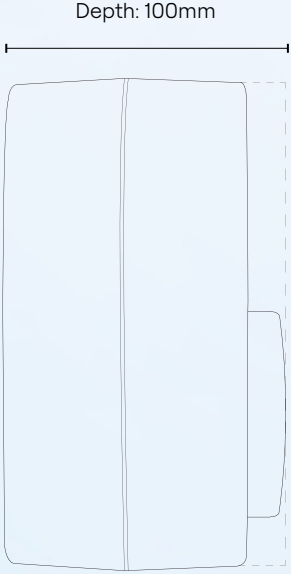
complies with the device-level requirements set out under the Electric Vehicles (Smart Charge Point) Regulations 2021, as detailed in the Technical File (available on request).

Signature: Authorised to sign on behalf of seller	
Name	
Date	

 Home Pro 3

 ePod 29


Width: 140mm
Ohme
Height: 230mm


Depth: 100mm

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1. Safety Precautions

This document contains important safety information relating to your Ohme ePod charger..

Please retain this document for future reference.
Please read the document fully before using the Ohme ePod.
Not following the safety instructions can result in electric shock, fire, serious injury or death.

!	The charger should be inspected periodically to check for damage to the cabling and the enclosure. Do not use if the product is defective or appears damaged. Contact the Ohme Helpdesk for advice
!	Do not attempt to open, repair, tamper or modify the Ohme Charger in any way. There are no user-serviceable parts
!	We strongly recommend that a competent person (e.g. qualified electrician) installs and/or inspects the installation to check for safety and supply adequacy before use
!	The overall installation should be in accordance with the Wiring Regulations and Code of Practice for Electric Vehicle Charging Equipment specific to your territory, see the 'Compliance' section in the guide for specific territory requirements
!	Handle the Ohme ePod with care. Do not expose any part of the unit or cable to severe forces, impact or sharp objects
!	The Ohme ePod is only intended for vehicles that do not require ventilation during charging (NB all mainstream electric vehicles do not require ventilation)
!	You may clean the Ohme ePod with a soft damp cloth. Do not use solvents or abrasives

2. Welcome to Ohme

This guide contains everything you need to install the charger and get started on the Ohme app.

If you need more information, see the 'Help Desk Contact Information' section in this guide.

Product description

- The Ohme ePod is an Electric Vehicle (EV) charging device.
- All Ohme ePod units are non- tethered, which means the cable can be removed.
- The charger is to be used with a single phase electricity supply.
- Please read the Product Specifications below related to your product model.
- The product conforms to the latest safety standards shown in the 'Compliance' section

Installer information

Make a note of the charger's serial number, this is important if the customer needs to contact the Ohme Helpdesk.

Serial Number

Ohme								

Installer:
Name/Company:
Contact Number:
Installation Date:

3. Product Specifications

Check your model variant before following the product specification.

ePod 1 PHASE	
What's in the Box	Ohme ePod 1x CT clamp 2x Wago clips and connector block Hardware fixings for installation
Voltage	230 V AC
Frequency	50 Hz
Max Current, Power Output	32 A, 7.4kW
Operating Temperature	-25 ºC to 50 ºC
Storage Temperature	-40 ºC to 85 ºC
Cable Connection	Type 2 socket to IEC62196
Residual current function (RCD)	The RCD in the unit is certified as an RCD-DD, conforming to IEC62955, this has a 30mA Type A characteristic with 6mA DC. It is usually required to install an upstream RCD dependant on your local regulations in your territory. Any upstream RCD must be at least Type A 30 mA.

PEN fault detection	The Ohme ePod has an in-built PEN fault detection function and conforms to 722.411.4.1 (iv) of BS7671 18th edition. After activating PEN, the car will not reconnect to the vehicle for 5 minutes
Overcurrent protection	Overcurrent protection to be fitted separately as part of installation. We recommend a 40A Type B MCB
CT Clamp (s)	Can be fitted in any orientation between the 'Electricity Meter' and 'Main Fuse Box'. Ideally as close as possible to the Electricity Meter
Ingress protection	IP54 (suitable for use outdoors in all weather)
Impact Protection	IK08
Data Communication	2G / 3G / 4G
Shipping weight	1.9 kg
Colour	Black

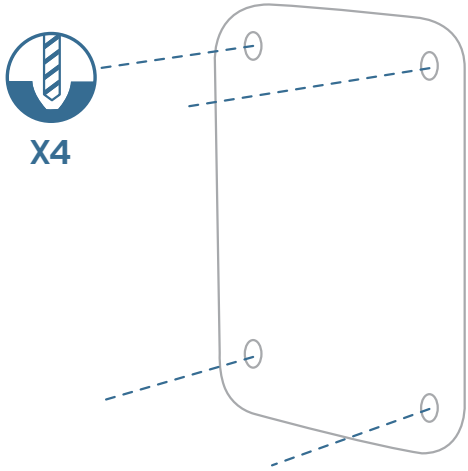
ePod 1 PHASE - UK MODEL ONLY WIFI/BLUETOOTH VARIANT	
What's in the Box	Ohme ePod 1x CT clamp 2x Wago clips and connector block Hardware fixings for installation
Voltage	230 V AC
Frequency	50 Hz
Max Current, Power Output	32 A, 7.4kW
Operating Temperature	-25 ^{0}C to 50 ^{0}C
Storage Temperature	-40 ^{0}C to 85 ^{0}C
Cable Connection	Type 2 socket to IEC62196
Residual current function (RCD)	The RCD in the unit is certified as an RCD-DD, conforming to IEC62955, this has a 30mA Type A characteristic with 6mA DC It is usually required to install an upstream RCD dependant on your local regulations in your territory Any upstream RCD must be at least Type A 30 mA

PEN fault detection	The Ohme ePod has an in-built PEN fault detection function and conforms to 722.411.4.1 (iv) of BS7671 18th edition After activating PEN, the car will not reconnect to the vehicle for 5 minutes
Overcurrent protection	Overcurrent protection to be fitted separately as part of installation We recommend a 40A Type B MCB
CT Clamp (s)	Can be fitted in any orientation between the 'Electricity Meter' and 'Main Fuse Box'. Ideally as close as possible to the Electricity Meter
Ingress protection	IP54 (suitable for use outdoors in all weather)
Impact Protection	IK08
Data Communication	Customers Household Wifi - IEEE 802.11b/g/n-compliant, supports 20 MHz, 40 MHz bandwidth in 2.4 GHz band and Bluetooth
Shipping weight	1.9 kg
Colour	Black

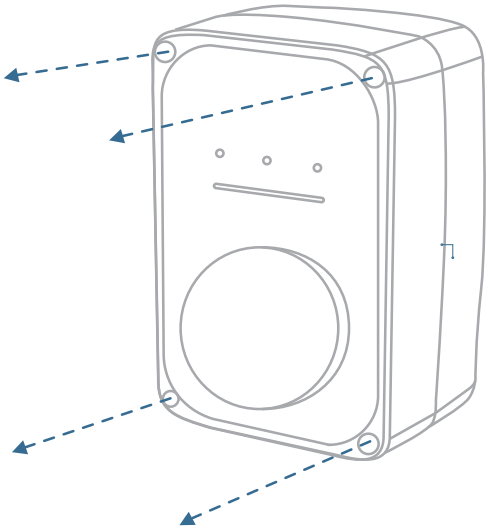
4. Electrical Installation Guide – 1 Phase

The Ohme ePod is a single-phase device and has a dynamic load balancing feature

1. Find a suitable location for the ePod charger. Use the drill template provided, drilling 4x holes with a 7mm drill bit. Insert wall plugs.



2. Remove the plastic screws and front cover of the Ohme ePod.

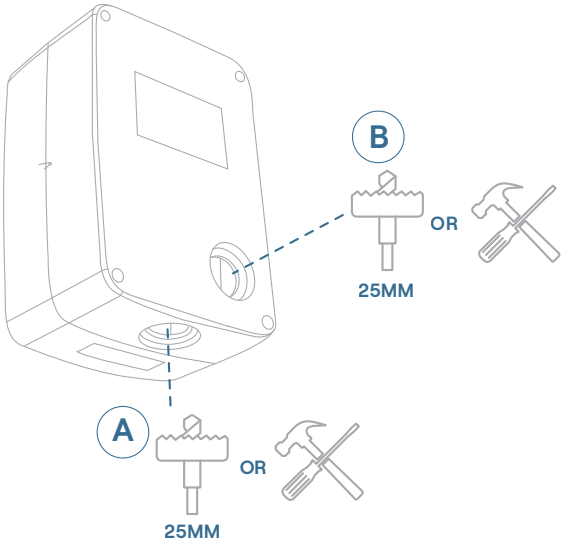


3. The ePod has two input cable entry points, A or B. Decide on the installation most suited to the customer.

EITHER
Remove the rubber grommet.

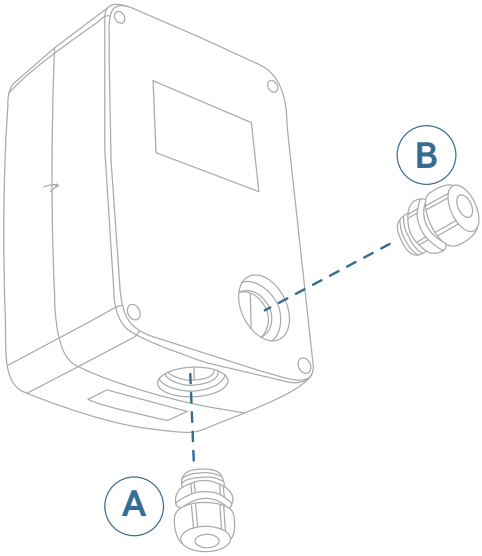
OR

Knock out or drill out the plastic entry point, ensure edges are deburred before installing the cable gland.

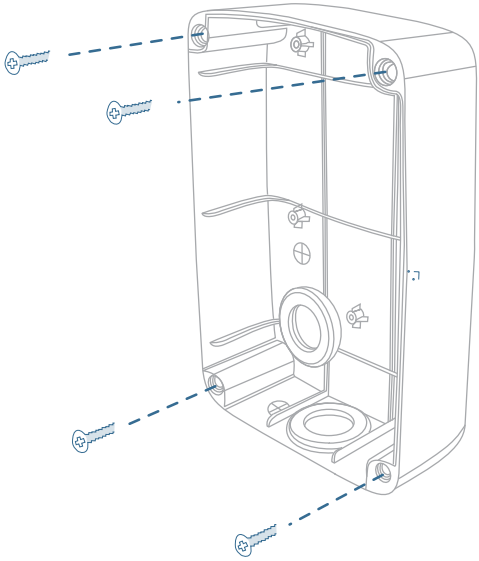


4. An M25 cable gland and blanking grommet are provided and can be interchangeable between the entry points A or B.

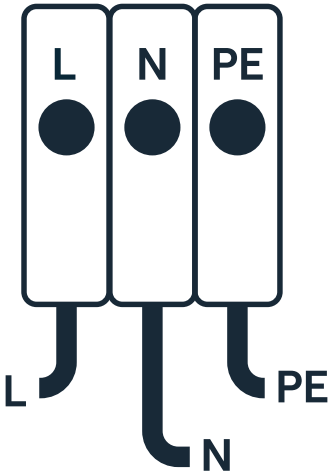
NOTE: Ensure the blanking grommet is used on the open entry point to maintain the charger's IP rating.



5. Secure ePod rear housing to a flat wall using the screws provided. Where the wall surface is uneven, ensure the charger is not twisted when secured to the wall. It may be necessary to add spacers between the unit and the wall to avoid twisting, otherwise the unit may not seal correctly.



6. The ePod has a terminal block and can accept a 10mm2 conductor. Feed the input cable through the M25 cable gland, and connect the Live, Neutral, and Earth wires.

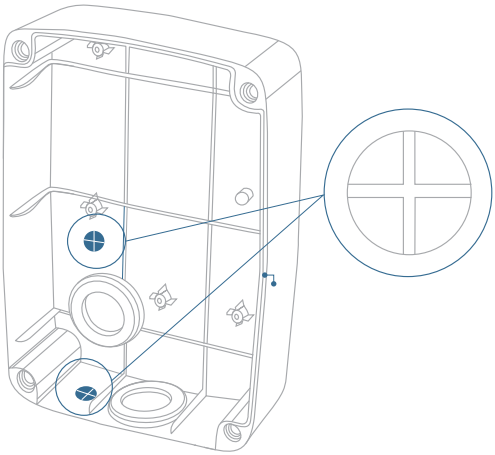


7. Connect the CT clamp current sensor inputs to the Spring Connectors located on the circuit board. You will likely need to extend the cable.

NOTE: Can accept a maximum of 1.6mm2 conductor size.

NOTE: Data Cable can be Ethernet, Twisted pair, Belden cable up to 60m in length



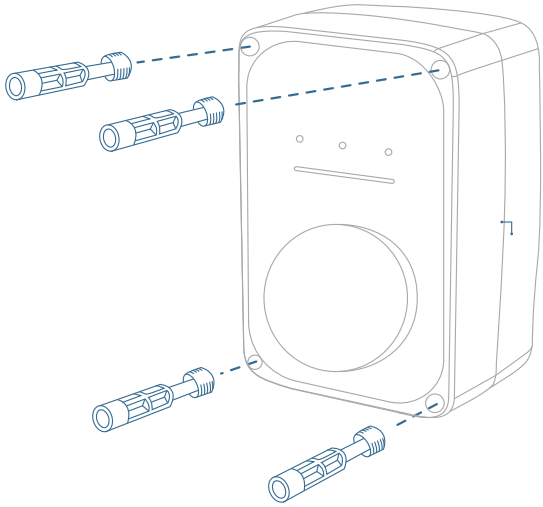


NOTE: If using a separate data cable, there are two marked areas for drilling the rear housing, to install separate glands, suitable for either M12, or M16, not provided.

8. -

- Place the CT clamp provided on first incoming live cable. Can be fitted in any orientation between the 'Electricity Meter' and 'Main Fuse Box'. Ideally as close as possible to the Electricity Meter.
- Using Wago connectors provided, connect the data cable to the CT clamp. Place Wago connectors in the Wago box in suitable location and securely clip cover into place.

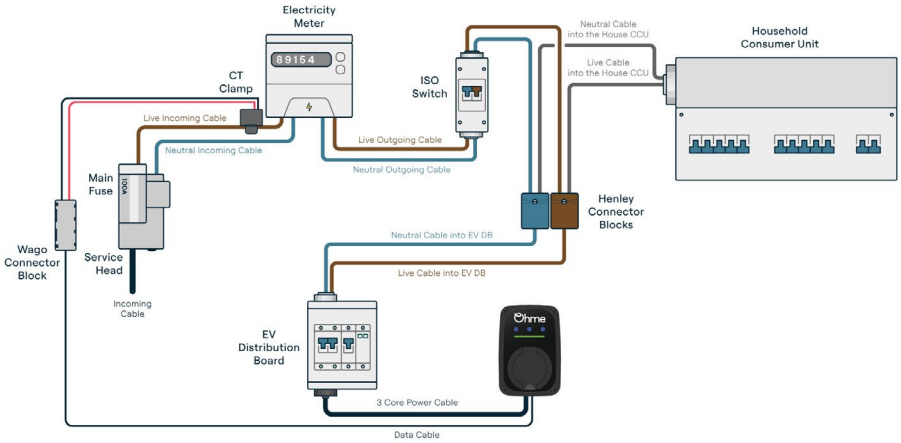
9. Secure the ePod front housing to the rear housing mounted to the wall using the plastic screws provided. Use torque setting up to 1.2Nm to avoid breaking the plastic screws. Reaffix the screw caps provided.



10. Turn power back on.

5. 1 Phase CT Clamp Overview (7kW)

UK 1 PHASE



6. Electrical Installation Features

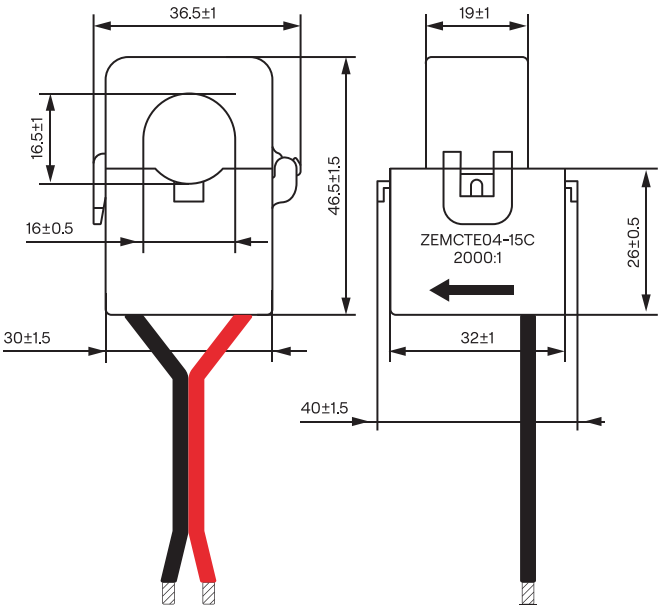
CT Clamps:

Connect the current sensor inputs to the CT clamp, you will likely need to extend the cable.

The CT clamp and wiring is not polarity sensitive – you can install the CT clamp in either direction.

CT clamp is provided to measure the electrical demand of the property, or sub-board. The unit will limit the maximum current available to the vehicle to keep the household demand below the set threshold/fuse value.

Where load balancing has been installed and activated, and if the CT clamp is removed, or is faulty, the unit will revert to 16A. It is therefore sensible to ensure the spare capacity, after taking account of other loads and diversity, is at least 16A.



Operating Range	0 - 50 A
Accuracy	0,1 (@Ipr=20A)
Output Current	0-25 mA
Turn	2000/1
Load Resistance	20Ω

Important Installation Notes:

NOTE: Where the dynamic available capacity for the charger drops to below 6A, the Ohme ePod will pause the charging for at least five minutes to prevent rapid switching of the vehicle where the current is hovering above and below the threshold.

NOTE: The supplied WAGO lever connectors are for the load balancing clamp only and must not be used for the main supply connections as they are not appropriately rated.

NOTE: The CT clamp and wiring is not polarity sensitive – you can install the CT clamp in either direction.

7. Commissioning and Installer Mode

- Commissioning can be achieved by either Installer Web App, or the buttons on the ePod.
- Before commissioning, you should have received an email from Ohme with the credentials to log in into your Installer Web App.
- Please contact your Ohme representative to retrieve these. Please see 'Help Desk Contact Details' for more information.
- Once the commissioning setup has been completed, the charger will establish a connection to the internet. Once a connection to the internet has been established, the charger will connect to the Ohme server.

  NOTE: See Connectivity section for further details.

Commissioning via Installer Web App

1. Access the 'Installer Web App' from the mobile/tablet or computer using the login credentials.

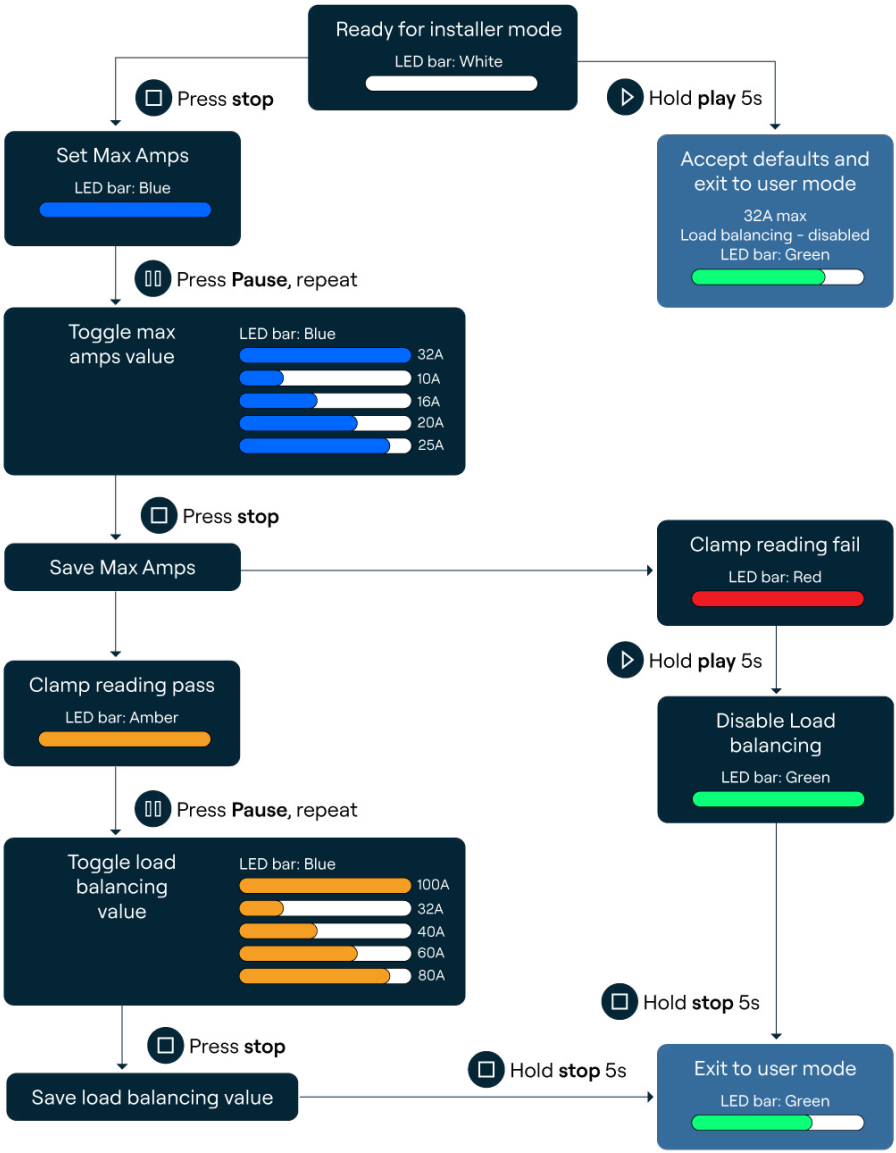
2. Enter the Serial Number of the charger by scanning the QR code or inputting manually.

3. Enter the configuration page of the charger:

- Click on take reading to check that the CT clamp has been installed correctly.
- If CT clamp is not installed, click 'Skip'. This will limit the charger output to 16A.
- Set the Max Charge current. This will be set to 32A by default, increase or decrease the amperage output.
- Enable the Load balancing.
- Set the Load balancing threshold
- Click on "Apply settings"
- Enable the Load balancing.
- Set the Load balancing threshold
- Click on "Apply settings"

Commissioning via ePod buttons (Quick Set Up)

Using the buttons on the ePod, follow the set-up flow below.



8. RCD Test Mode.

To test the internal RCD is working, use an EV tester to simulate RCD leakage to trip the RCD. Vehicle must disconnect.

Note: In the event of an RCD activation in the Ohme charger, the unit can be reset by power cycling (switch the supply off, wait 5 seconds, and switch on) or by unplugging and re-plugging the vehicle.

Note: If you can't get a reading, try boiling a kettle or using another high-powered appliance as this can help record a reading.

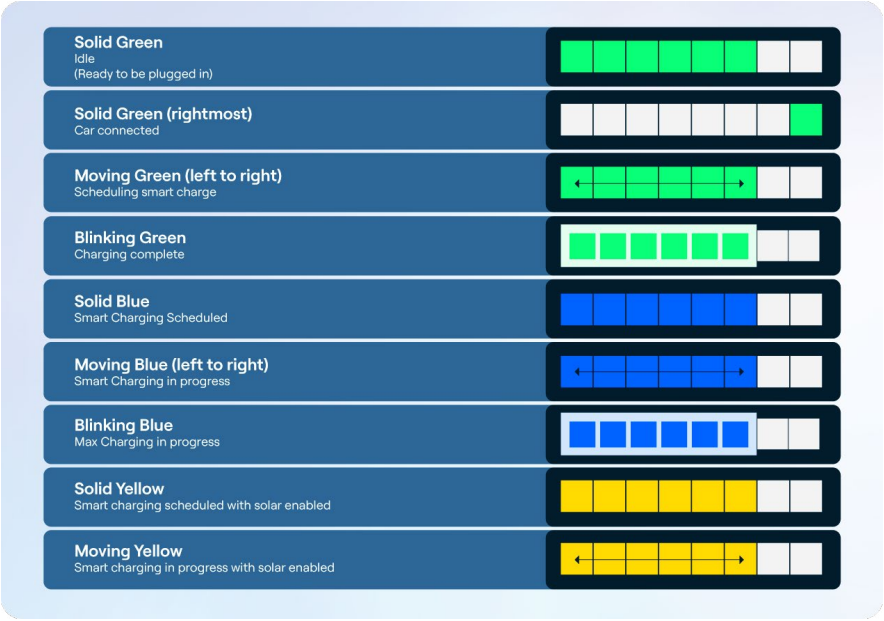
Once the Installer Mode setup has been completed, the charger will establish a connection to the internet. Once a connection to the internet has been established, the charger will connect to the Ohme server.

NOTE: See Connectivity section for further details.

IMPORTANT: Installer mode must be disabled before leaving the site.

9. LED Status Light Indicator





Pairing the Customer

Installer does not need to be present.

The Customer downloads the app and follows the instructions to pair.





10. Connectivity

Network Products Only

Ohme chargers use a pre-configured 4G data connection and relies on a mobile phone connection for the smart features.

Where it is known to be unreliable the customer should be made aware that the smart features of the charger will also be unreliable. Ohme cannot be held responsible for the installation location and issues with the public mobile phone network.

Where the unit cannot establish data transfer at the time of plug in, the unit will behave like a dumb charger and will not schedule the charging session.

Wifi & Bluetooth Products Only

If using Wifi -

To connect to Wi-Fi, the customer will need to use the Ohme App and send their Wi-Fi password to the charger via Bluetooth.

You can still commission the charger without a Wi-Fi connection using the controls on the charger, but if you use the 'Ohme Installer Portal' to commission the charger the customer will first need to connect the charger to a Wi-Fi network for the installer portal to communicate with the charger.

How the customer connects to the charger with a Wi-Fi network:

1. Download the 'Ohme app' from the Apple App Store or the Google Play Store.
2. Create an account and start the onboarding process in the app.
3. Link the charger in the app to enter the Wi-Fi connect journey.
4. Connect to the charger via Bluetooth by granting the Ohme app permissions to access the phone's Bluetooth and Location.

5. Select the Wi-Fi network you want to connect to from the list of Wi-Fi networks the charger has found. NOTE: Only Wi-Fi networks with 2.4Ghz can be selected. (IEEE 802.11b/g/n-compliant, supports 20 MHz, 40 MHz bandwidth in 2.4 GHz band)
6. Enter the password for the Wi-Fi network selected.
7. Press connect charger.
8. The charger should now have the correct Wi-Fi credentials and password saved.
9. Unplug the device for 30 seconds. Plug it back again.
10. Once plugged in, the charger should go online withing 70 seconds. (The orange light indicator should stop blinking).

If using Bluetooth –

Bluetooth allows the customer to link the Ohme ePod charger to the Ohme app, if Wi-Fi connectivity is not available/reachable.

This feature also offers the ability to unlink charger, approve a plug in, and ability to lock/unlock the chargers' buttons.

11. Compliance

V1.3			Germany	France	Austria	Norway	Sweden	Denmark	Netherlands	Belgium	Spain	Italy	Portugal	Greece	Ireland	UK	Australia	New Zealand	USA	CAN
Electrical Safety		Legal	VDE 0100	NF C15-100	ÖVE/ÖNORM E 8001	NEK 400:2018	SS 4364000:2017	NEN 1010:2020	GREI 2020	REBT-2002	CEI 64-8:2019	RTIEBT Ordinance No. 949-A/2000	Law 4483/1965 (A' 118)	IS 10101:2020	BS7671:2018 Amendment	AS/NZS 3000:2018		NFPA 70		
				UTE C15-7-722											S.I. 2016/1101					
			LVD - 2014/35/EU																	
		Standard	IEC 61557-12:2018																	
			IEC 61851-1:2019																	
			IEC 62955:2018																	
			IEC 62196-1																	
			IEC 61851-22																	
			IEC 62196-2																	
			IEC 60364:																	
			HD 60364:2020																	
			EN 62752:2016+A1:2020																	
																AS/NZS 3820				
																AS/NZS 4417.2				
																AS/NZS 60335.1				
																AS/NZS 60898				
																AS/NZS 61009				
																AS/NZS 60947				
Product Codes	HP5	OHME0002GB002													X	X				
	HP8	OHME0002GB002-8M													X	X				
	EP0	OHMEX1GB003-BL													X	X				
	Go CMD	OHME0402GB001	X		X	X	X	X	X	X	X	X	X	X						
	Go Shuko	OME0702EU001	X		X	X	X	X	X	X	X	X	X	X						
		EP0-07EU-4G-BLSTD-01	X		X	X	X	X	X	X			X	X						
		EP0-07EU-DU-BLSTD-01	X		X	X	X	X	X	X			X	X						
		EPS-07EU-4G-BLSTD-01		X								X								
		EPS-07EU-4G-BLLIN-01		X																
		HP5-07EU-4G-BLSTD-01	X		X	X	X	X	X	X	X	X	X	X						
		HP8-07EU-4G-BLSTD-01	X		X	X	X	X	X	X	X	X	X	X						
		HP5-11EU-4G-BLSTD-01	X		X	X	X	X	X	X			X	X						
		HP8-11EU-4G-BLSTD-01	X		X	X	X	X	X	X			X	X						
		HP5-11EU-4G-BLDEL-01							X											
		HP8-11EU-4G-BLDEL-01							X											
		EP0-11EU-4G-BLSTD-01	X		X	X	X	X	X	X			X	X						
		HP5-07EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		HP8-07EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		HP5-11EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		HP8-11EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		HP5-11EU-4G-BLMID-02	X																	
		HP8-11EU-4G-BLMID-02	X																	
		EP0-11EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		EPS-11EU-4G-BLMID-01		X								X								
		EP0-07EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		EPS-07EU-4G-BLMID-01		X								X								
		EP0-07AU-WI-BLSTD-01															X	X		
		HP5-07AU-WI-BLSTD-01															X	X		
		HP8-07AU-WI-BLSTD-01															X	X		
		EP0-22EU-4G-BLSTD-01	X		X	X	X	X	X	X			X	X						
		EPS-22EU-4G-BLLIN-01		X								X								
		EP0-22EU-WI-BLSTD-01	X		X	X	X	X	X	X			X	X						
		EP0-22EU-4G-BLMID-01	X		X	X	X	X	X	X			X	X						
		EPS-22EU-4G-BLMID-01		X								X								
		EPS-22EU-WI-BLLIN-01		X																
		HP5-09US-4G-BLSTD-01																	X	X
		HP8-09US-4G-BLSTD-01																	X	X
		HP5-07GB-WB-BLSTD-01													X	X				
		HP8-07GB-WB-BLSTD-01													X	X				
		EP0-07GB-WB-BLSTD-01													X	X				
		EPS-07GB-4G-BLSTD-01													X	X				
		HP5-07EU-4G-BLSHU-01							X	X	X	X	X							
		HP8-07EU-4G-BLSHU-01							X	X	X	X	X							

12. Disposal for Users of Waste Electrical & Electronic Equipment (WEEE)



This symbol is only valid in the EU. This symbol on the product and documentation means that used electrical and electronic products should not be mixed with general household waste.

For disposal, proper treatment, recovery and recycling, please take this product to designated collection points, or contact your local authorities or dealer and ask for the correct method of disposal.

13. Help Desk Contact Information

	Address	**Email**	**Telephone**
UK	Ohme Operations UK Ltd 125-130 Wellington House, The Strand London WC2R 0AP	ohme-ev.com/support	+44 (0) 20 3375 1586
IRELAND	Ohme Technologies Ltd Unit 74, Penrose Wharf, Penrose Quay Cork Ireland T23 HF51	ohme-ev.com/ie/help	+353 21 601 0311

UK & Ireland Manufacturer's Warranty Only (V1.0)

The key terms of the warranty for the Ohme ePod are as follows

- The device is protected by a manufacturer's warranty for 36 months from the date of installation. This covers parts and labour
- The minimum operational life of the Ohme ePod exceeds 36 months
- The warranty covers on-site assistance, repairs and replacements, at no cost

The warranty covers any defects in materials or workmanship under normal use. During the warranty period, Ohme will refund, repair or replace, at its discretion, at no charge, products or parts of the product which prove defective because of improper materials or workmanship under normal use and maintenance. This will include labour costs to repair or replace the unit at the installation site.

Ohme will either repair the product using new or refurbished replacement parts or replace the product with new.

A replacement product assumes the remaining warranty period of the original product or for 180 days from the date of the replacement or repair, whichever is longer.

The warranty does not cover any issues that are caused by conditions, malfunctions, or damage not resulting from defects in the charging unit. The warranty does not cover damage or malfunction directly caused by abuse, misuse, negligence, accident, improper use, including but not limited to:

- Failure to follow the instructions and warnings provided in the product literature
- The environment or "Acts of God" such as fire, earthquake, flood
- General appearance of the product such as discolouration or damage to paint, labels, scratches, dents and cracks
- Any repair, alteration or modification to the product other than those authorised by Ohme

You may have other legal rights under local laws in addition to the rights under this manufacturer's warranty. Contact Ohme in the first instance to discuss your options.

To initiate a service from Ohme under the manufacturer's warranty, please contact us by email using the appropriate contact details, see 'Help Desk Contact Details' table above. Please have the serial number of the charging unit to hand and it will help if you have the details of your installer.

Limitation of Liability

No liability will be accepted for any loss, costs or damage as a consequence of using or misusing the product except, and only to the extent, where this is caused by our negligence.

Terms and Conditions

For Terms and Conditions of the product please visit our website at **www.ohme-ev.com**

Statement of Compliance

The Electric Vehicles (Smart Charge Points) Regulations 2021

Seller name: Ohme Operations UK Ltd.

Seller address: 125-130 Wellington House, The Strand, London WC2R 0AP

Ohme Operations UK Ltd declares under sole responsibility that the following charge point models comply with the requirements set out under the Electric Vehicles (Smart Charge Point) Regulations 2021, as detailed in the Technical File (available on request).

Compliance **(including** Schedule 1: Security)

Product Family	Product Code	Description	Firmware
Ohme ePod	OHMEX1GB003-BL / EP0-07GB-WB-BLSTD-01	ePod Type 2 Socket	All released versions

None of the above products are sold with Demand Side Response agreements in place at the point of sale.

Signature:

Name: Daniel Hollingworth
Position: Engineering Director
Date: 1st December 2022

Statement of Compliance (from Installer or Distributor)

Seller name	
Seller address	

declares under sole responsibility that the relevant charge point,

Charge point model	
Date of sale	

complies with the device-level requirements set out under the Electric Vehicles (Smart Charge Point) Regulations 2021, as detailed in the Technical File (available on request).

Signature: Authorised to sign on behalf of seller	
Name	
Date	

Ohme