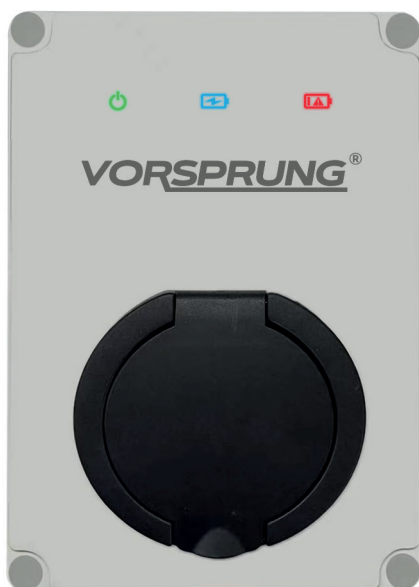
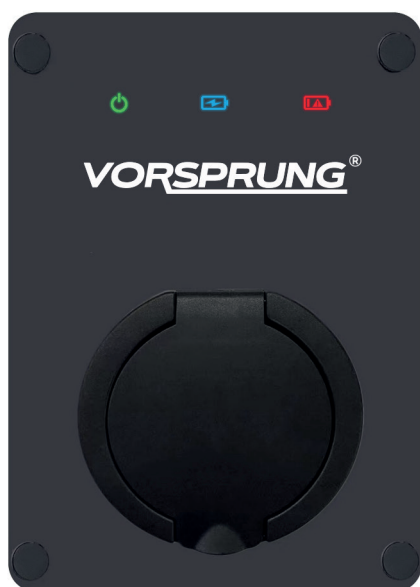


# **VORSPRUNG**<sup>®</sup>

## Electric Vehicle AC Charging Unit



## User Manual

Model: 20146 & 20147



Thank you for choosing one of our Vorsprung AC charging unit. To help you correctly use, operate, maintain, check and troubleshoot this AC charging unit, please carefully read this User Manual before use, operate according to this User Manual only, and keep safe for future use.

## This Unit must only be installed & fitted by a Certified Engineer

Installation must only be performed by a Certified Engineer competent 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.
- If the advice in this manual is not understood, contact the distributor for further advice and/or training before attempting installation/operation of the equipment.

The manufacturer/distributor 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 engineer.

**NOTE:** All electrical work must be performed in accordance with the current Electrical Wiring Regulations.

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The input and output voltage of this equipment is risk high voltage; this will endanger people's life. Please strictly follow all warnings and operating instructions on the machine and in this manual. Never disassemble the outer cover of this machine.

# 1- Safety rules

## **Installation of this Unit must be Performed by a Certified Engineer**

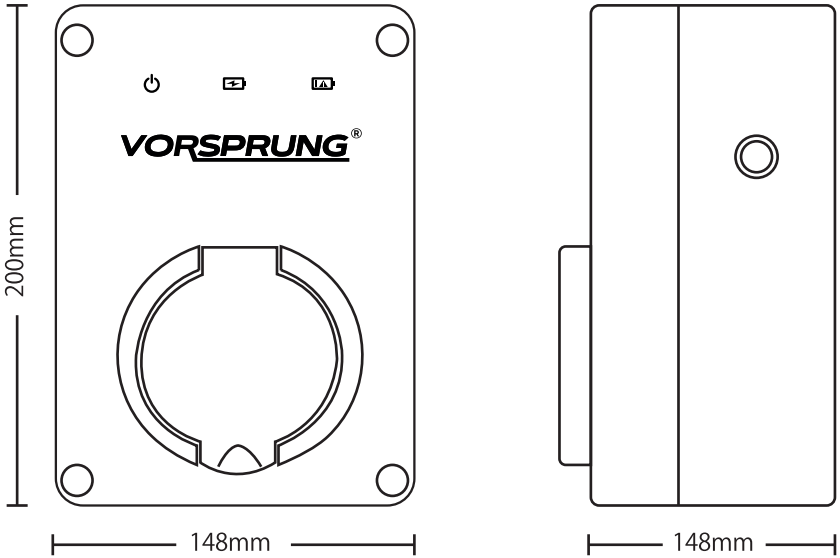
- 1.1. Turn off the power supply prior to and during the installation, to prevent electric shock.
- 1.2. The charging unit's power cable must be firmly connected and well insulated. Loose connection and damages will cause circuit failure, which may cause a fire or casualties in severe cases.
- 1.3. The installation of the charging unit and connection to the power grid must be conducted by a trained, certified engineer.
- 1.4. If the unit is dropped at any point prior to installation, it should not be installed until the engineer has inspected the unit to determine whether or not it can safely be installed.
- 1.5. Do not wash or cover the charging unit with any liquid. To clean the charging body, wipe gently with a lightly damp cloth, avoiding the connector area.
- 1.6. Any faults which arise that may impact the safety of the unit should be addressed by a certified engineer. Please do not attempt any repairs yourself.
- 1.7. The charging unit should only be installed by a certified engineer. The seller will not bear any responsibility for any loss caused by uncertified engineers and personnel for any modifications.

## 2- Introduction

This unit is a single 7.4kW AC charging socket. The unit has multiple protective functions and is simple to use. It has a type 2 socket but can be used with any type vehicle as long as you have the right cable. There is an Emergency Stop Switch located on the front of the unit.

This unit can recognise the charging capacity of your vehicle and automatically adjust itself to provide the maximum power.

### 3- Design Specification



### 4- Technical Specification

Attribute	Product model	Single 7.4kW AC Charging Socket
Environment	Operating Temperature	-30°C ~ +55°C
	Humidity	5%~95%
	Altitude	≤2000m
	Noise Pollution	less than 30db
	Safety standards	IEC 62196-2, IEC 2010 SHEET 2-IIe, IEC 61851-1
	Input voltage	AC230V±15%
	Input frequency	50HZ
	Maximum Output Power	7.4kW
	Electric relay specification	50A 250VA
	Rated output	max output 32A 230-250V

Structure	Physical Installation	Suitable for outdoor, vertical installation
	Charging Type	Universal Socket Type 2
Function	LED indicators	Supported
	Emergency stop button	Supported
Safety	RCD	AC 30mA+DC 6mA
	PEN Protection	Supported
	Over voltage protection	Supported
	Lack voltage protection	Supported
	Overload protection	Supported
	Grounding protection	Supported
	High temperature protection	Supported

## 5- Site Requirements

- ❶ Altitude height  $\leq 2000\text{m}$
- ❷ Environment Temperature:  $-30^{\circ}\text{C} \sim +55^{\circ}\text{C}$
- ❸ Air relative humidity 5%~95%
- ❹ Please minimise exposure to torrential rain. Cover the unit appropriately or do not use in such conditions.
- ❺ Ensure the installation angle does not exceed  $5^{\circ}$
- ❻ Keep flammable and explosive objects away from the unit

## 6- Installation

**CAUTION:** The front panel is connected to the charger body by electric cables. Take care not to damage, strain or disconnect the cables. At the end of the procedure, make sure all connections are secure before refitting the panel.

**WARNING:** Make sure electrical power is isolated before starting this procedure. Turn power off at source.

**IMPORTANT:** Engineers 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 a Certified Engineer competent 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.
- If the advice in this manual is not understood, contact the distributor for further advice and/or training before attempting installation/operation of the equipment.

The manufacturer/distributor 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.

**NOTE:** All electrical work must be performed in accordance with the current Electrical Wiring Regulations in your geographical area.

### **BEFORE INSTALLATION:**

- 1- Establish a suitable site location for the unit that is both secure and environmentally safe.
- 2- Make sure the location meets the current legislation (if applicable).
- 3- Make sure there is a suitable mains power supply available at the installation site.
- 4- Make sure the unit model is correct and matches the order.
- 5- Make sure the unit and any accessories do not appear to have been damaged in transit.

Make sure the supplied fixings are suitable for the mounting location. If not suitable, alternatives must be obtained locally before proceeding with the installation.

### **INSTALLATION PROCEDURE:**

**CAUTION:** During the next steps, the charger front panel will be removed. Take care not to damage or strain cables or cable connections that run between the chassis and the front panel.

- 1- Remove the wall socket from the packaging.
- 2- Remove and retain the fixings that secure the front panel to the charger body.

3- Carefully ease the front panel away from the charger body to gain access to the interior.

4- Visually inspect the wall socket and internal components.

5- Use the charger body to mark the mounting position.

- The charger body should be on a flat and smooth surface.
- Make sure it is orientated correctly and is level.
- Mark the fixing holes onto the surface.

6- Drill marked fixing holes onto the surface and insert the wall plugs. Do not drill through the charger body.

7- Make note of the electrical connection terminals within the charger body.

8- Secure the charger body to the mounting location with appropriate fixings.

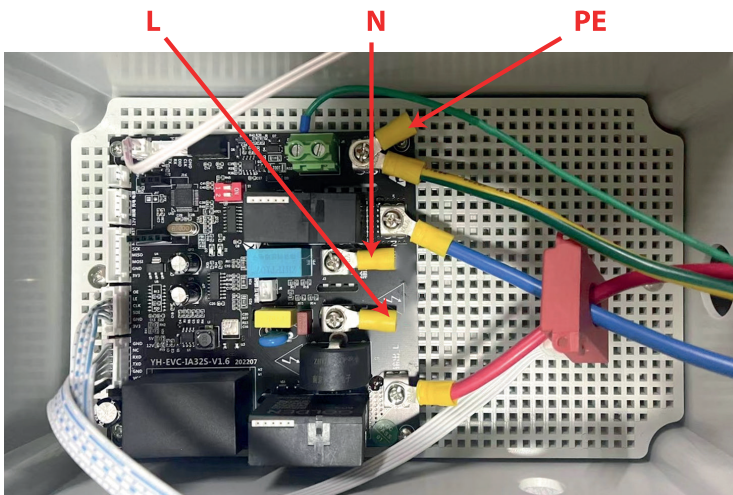
9- Route the power supply cable to the appropriate length to be able to connect to the terminals.

10- Make sure all cable connections are secure and have not become loose or damaged in transit or during installation.

Make sure all debris is removed from the front and rear halves of the charger body and that no debris is present on any of the components.

NOTE: All electrical work must be performed in accordance with the current Electrical Wiring Regulations in your geographical area.

## 6.1. Wiring mode





## 7- Light Indicators

Green



Power

Blue



Charging

Red



Fault

## 8- Operating Instructions



## 9- Guarantee

Subject to the provisions described below, this product is protected for 1 year from the date of purchase against defects in material and workmanship.

Prior to returning any defective products to Vorsprung, the end user must report the faulty product to Vorsprung. This can be done through emailing [info@vorsprungofficial.com](mailto:info@vorsprungofficial.com). If Vorsprung agrees that the product should be returned, it will issue a Return Authorisation Number. This number must be clearly marked on the packaging of the product to be returned. The customer will return the product at their own cost.

Should the product fail to perform as described within the relevant guaranteed period as set out above, it will be repaired or replaced with the same or functionally equivalent product by Vorsprung at its discretion, free of charge, provided the customer:

- 1) Provides Vorsprung with proof of purchase.
- 2) Returns the failed product to Vorsprung with shipping charge prepaid.

Replacement product may be refurbished or contain refurbished parts. If Vorsprung, by its sole determination is unable to repair the product it will replace the product with the same model or similar model with a similar specification.

The guarantee does not apply and will be null and void if, in judgement to Vorsprung,

the product fails due to damage from shipment handling, storage, Incorrect Installation, accident, inappropriate use or cleaning of the product, relocation of the product after its first Installation, abuse, misuse, or if It has been used or maintained in a manner not conforming to product manual instructions, has been modified in any way, or has had any serial number or other Identification markings removed or defaced.

Repair by anyone other than a qualified engineer will void this guarantee.

All defective products should be returned to Vorsprung with shipping charges prepaid.

Should an issue be found with your unit. Vorsprung will return your repaired/replaced unit free-of-charge to any UK address. Should the return address be outside of the UK return postage will be at Vorsprung's discretion. If the unit is found not to be defective return postage will need to be paid for by the customer.

Nothing in this agreement will affect the end consumer's statutory rights. Vorsprung only supply products for domestic, light commercial and private use.

Vorsprung accept no liability to the end consumer for any loss of profit, loss of business, business interruption, loss of business opportunity or time travel incurred.



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