ATESS | ENERCOLLEGE

ATESS AC Charger
Installation Guide

Standard Operating Procedures & Best Practices

ATESS ENERCOLLEGE

Technical Support Document

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1 Introduction

To ensure the proper and safe installation of the ATESS AC charging pile, please follow the steps provided in this guide.

2 Tools Required

The following tools are recommended for the installation process:

Torque wrench

Screwdriver

Wire stripper

Hydraulic crimper

Heat dryer

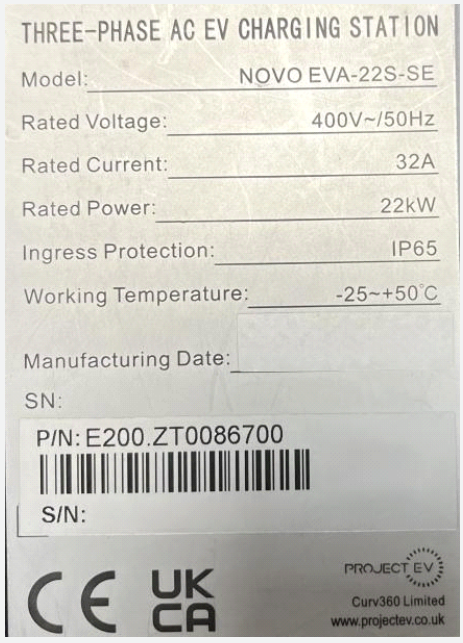
Multimeter

Insulating gloves

Forklift

3 Nameplate Overview

Check that the model and electrical parameters on the nameplate match your installation scenario.



a. Single-Phase AC charging pile Input voltage: 230V-260V~/50HZ

b. Single-Phase AC charging pile Input current: 32A

c. Three-Phase AC charging pile Input voltage: 230V-260V~/50HZ

d. Three-Phase AC charging pile Input current: 32A(Each phase)

e. When connecting the input, please select the appropriate cable size according to the actual machine type.

4 Installation Wiring

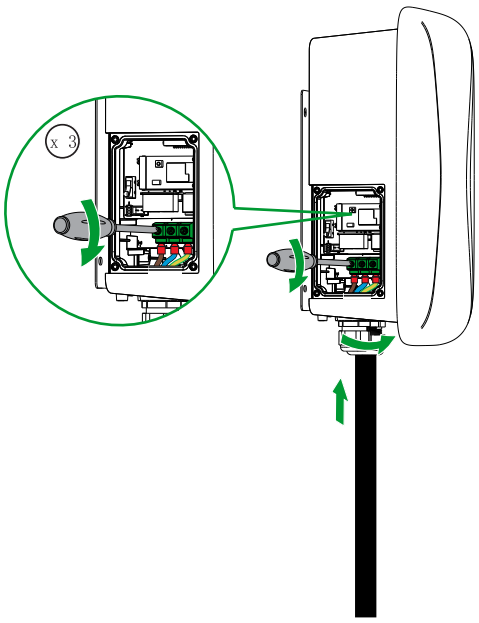
Reference for input cable model and connection terminals:

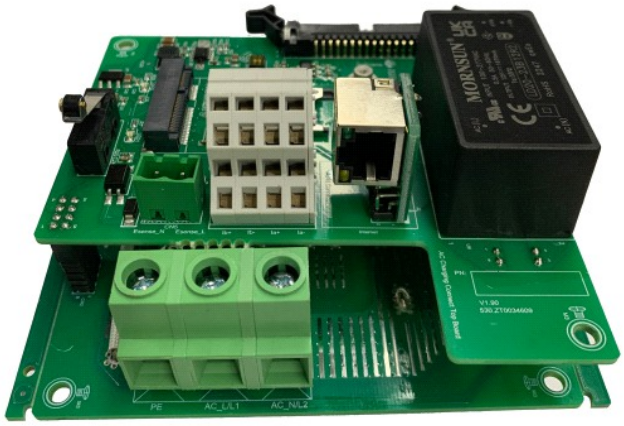
Model	Item	L	N	PE
3k	Terminal			
	Wire	⩾2.5mm² ⩾AWG12	⩾2.5mm² ⩾AWG12	⩾2.5mm² ⩾AWG12
7k	Terminal			
	Wire	⩽AWG10	⩽AWG10	⩽AWG10
9k	Terminal			
	Wire	⩽AWG9	⩽AWG9	⩽AWG9
11k	Terminal			
	Wire	⩾2.5mm² ⩾AWG12	⩾2.5mm² ⩾AWG12	⩾2.5mm² ⩾AWG12
12k	Terminal			
	Wire	⩽AWG8	⩽AWG8	⩽AWG8
22k	Terminal			
	Wire	⩾6mm² ⩾AWG9	⩾6mm² ⩾AWG9	⩾6mm² ⩾AWG9

Single-phase Charger Input Wiring Diagram:

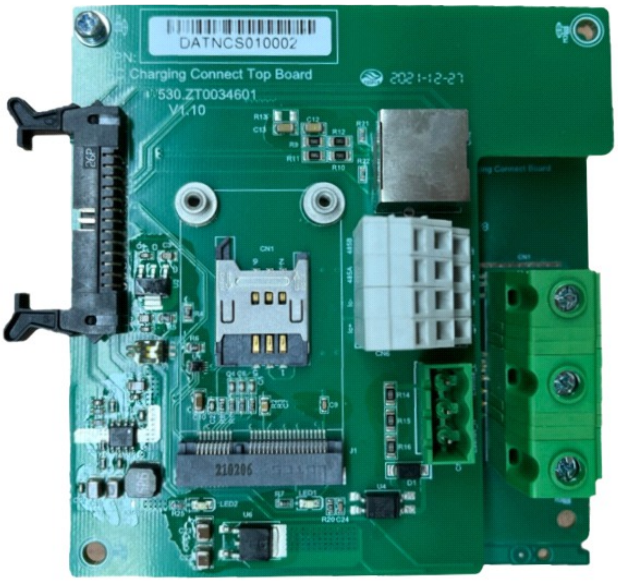
Crimp the below shown insulated ferrule or ring terminals on the end of the AC input wires. Connect the wires into the terminal block of the charge point as below. Close the side window with the cover, then the wring is done.(Use Copper Conductors Only.)

In Canada, a power supply intended to be fixed in place to a structure and supplied with a supply cord in accordance with section 12.1.1.1 shall be marked with the following or equivalent: “The suitability of the use of flexible cord in accord with CE Code, Part I, Rule 4-012, is to be determined by the local inspection authority having jurisdiction.”





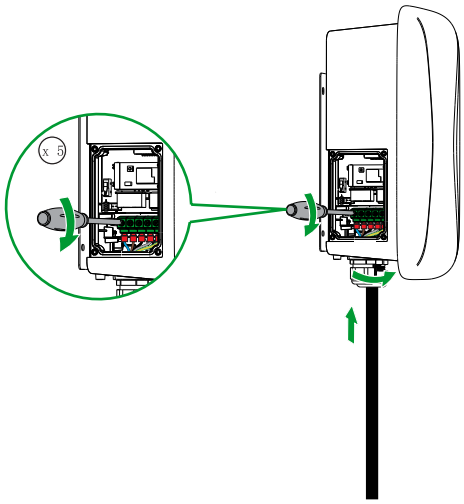
3-7K Input Board

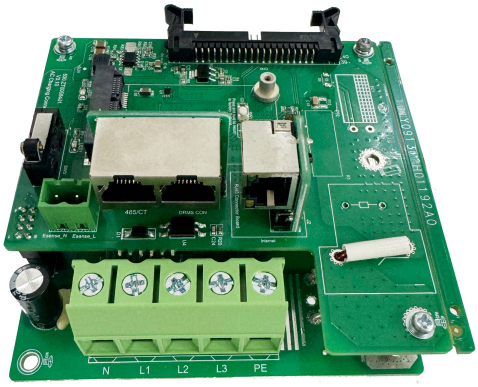


7-12K Input Board

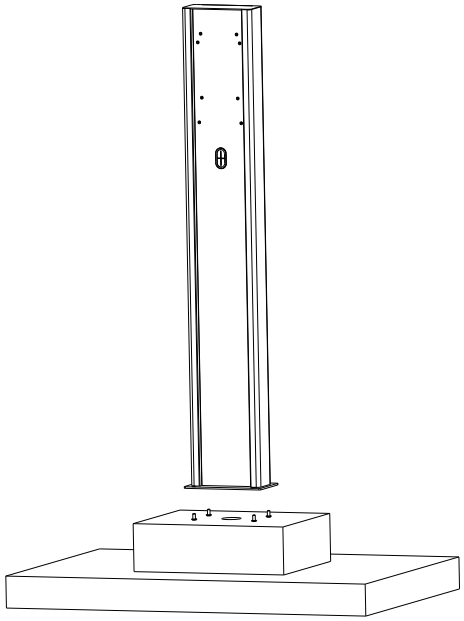
Crimp the below shown ring terminals on the end of the AC input wires and PE wires. Connect the wires into the terminal block of the charge point as below.

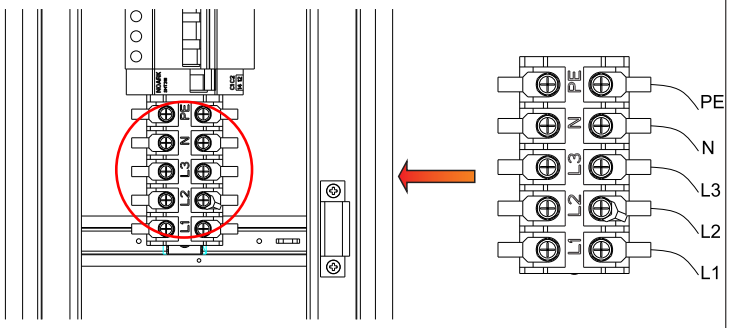
Check the wiring and then close the switch and the door. (Use Copper Conductors Only.)





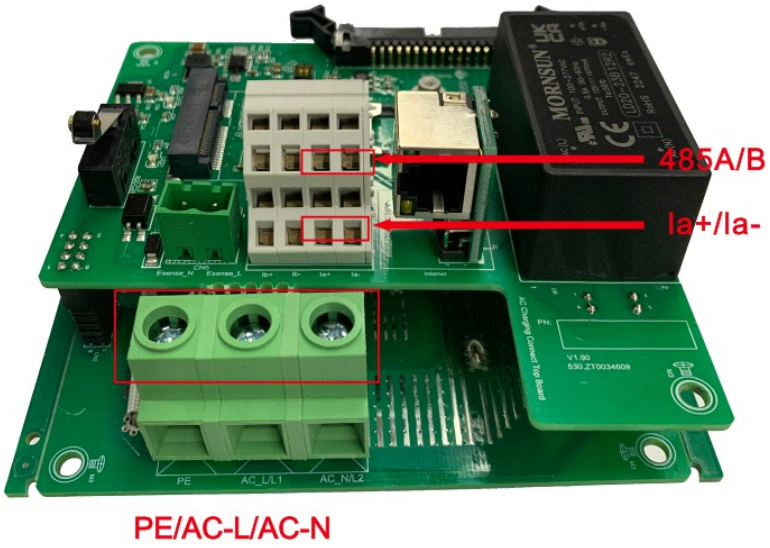
11-22K Wall-mounted charging pile Input Board





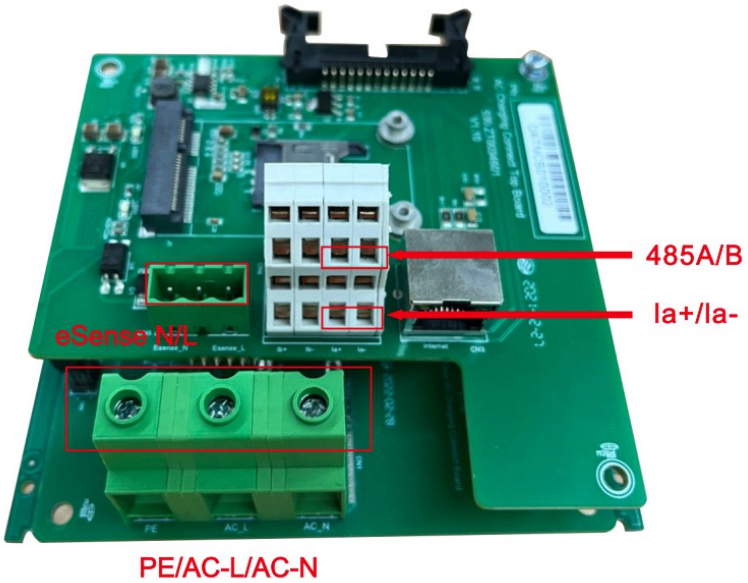
11-22K Vertical Charging pile Input Connection Point

3-7K Input board wiring definition diagram:



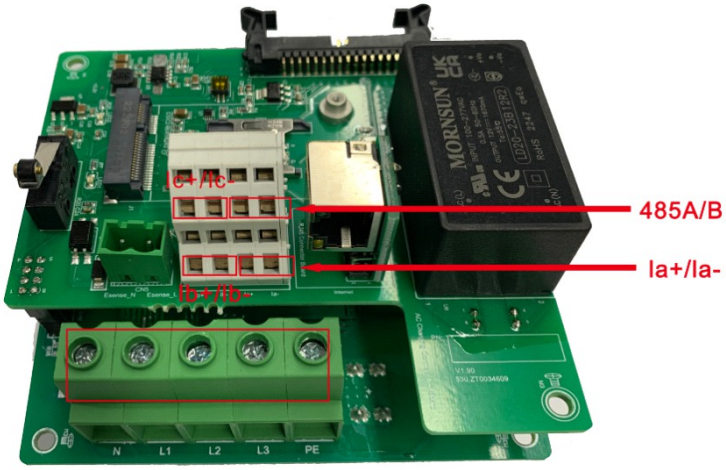
1. Terminal block for CT/meter wiring. The terminal definition is: 485A/485B is RS485 terminal for meter connection; Ia+/Ia- is for CT connection.
2. AC input terminals. Terminal definition is: L/N/PE.

7-12K Input board wiring definition diagram:



1. Terminal block for CT/meter wiring. The terminal definition is: 485A/485B is RS485 terminal for meter connection; Ia+/Ia- is for CT connection.
2. AC input terminals. Terminal definition is: L/N/PE.
3. Peak&Off Peak Charging Enable signal is: eSense L/N.

11-12K Input board wiring definition diagram:



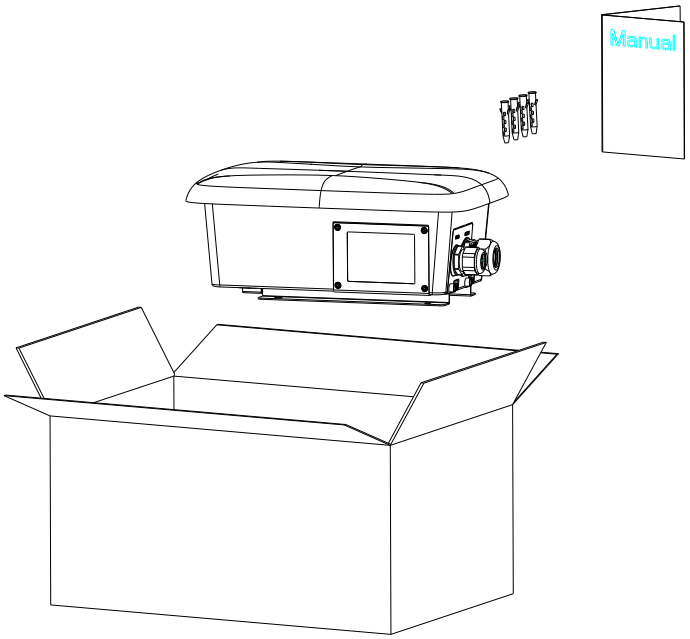
1. Terminal block for CT/meter wiring. The terminal definition is: 485A/485B is RS485 terminal for meter connection; Ia+/Ia- , Ib+/Ib-, Ic+/Ic- is for CT connection.

2. AC input terminals. Terminal definition is: L1/L2/L3/N/PE.

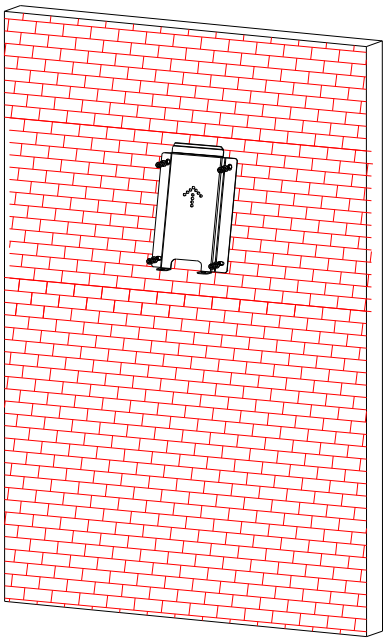
5 Installation Method

Mount on a wall:

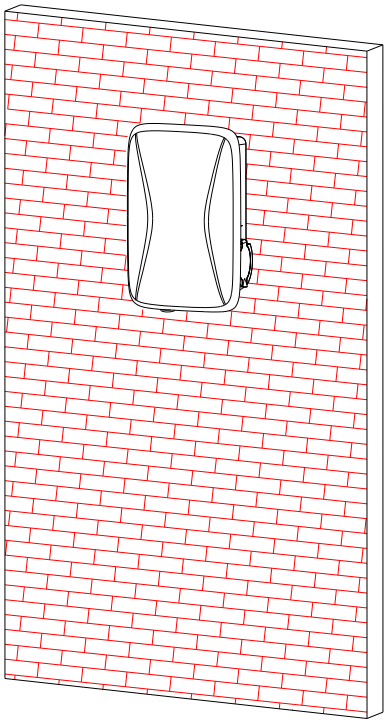
1. Open the packaging, you'll see a charge point, a mounting bracket, a user manual and a bag of mounting accessories. There is also an RFID card if the charge point is RFID version. For cabled version, a cable hooker is also included inside.



2. Remove the mounting bracket from the charge point, use it as a template to mark the position of the drill holes. Drill the holes and hammer the expansion bolts in the accessories bag into the holes. Then fix the mounting bracket onto the wall.



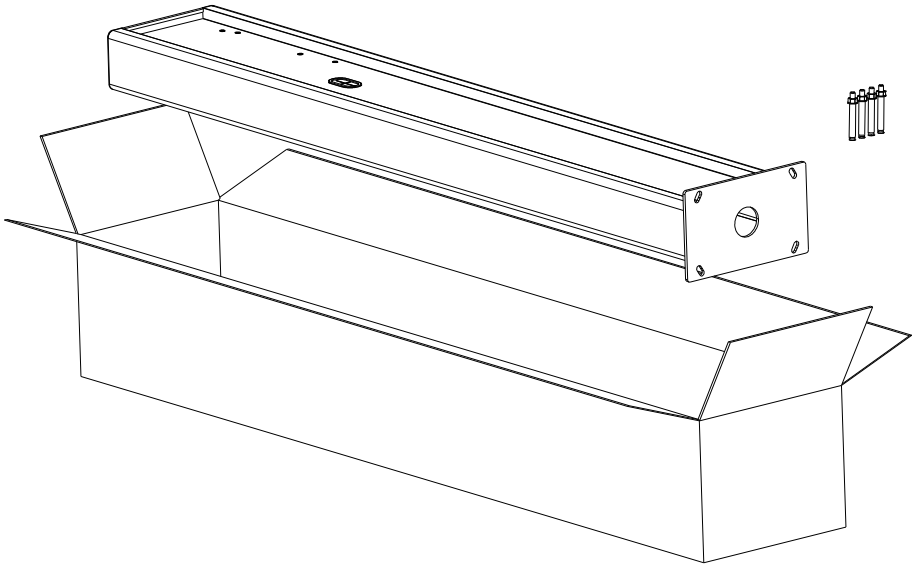
3. Put the charge point onto the bracket, and fix it with the 2 screws at the bottom of the charge point. The installation is done.



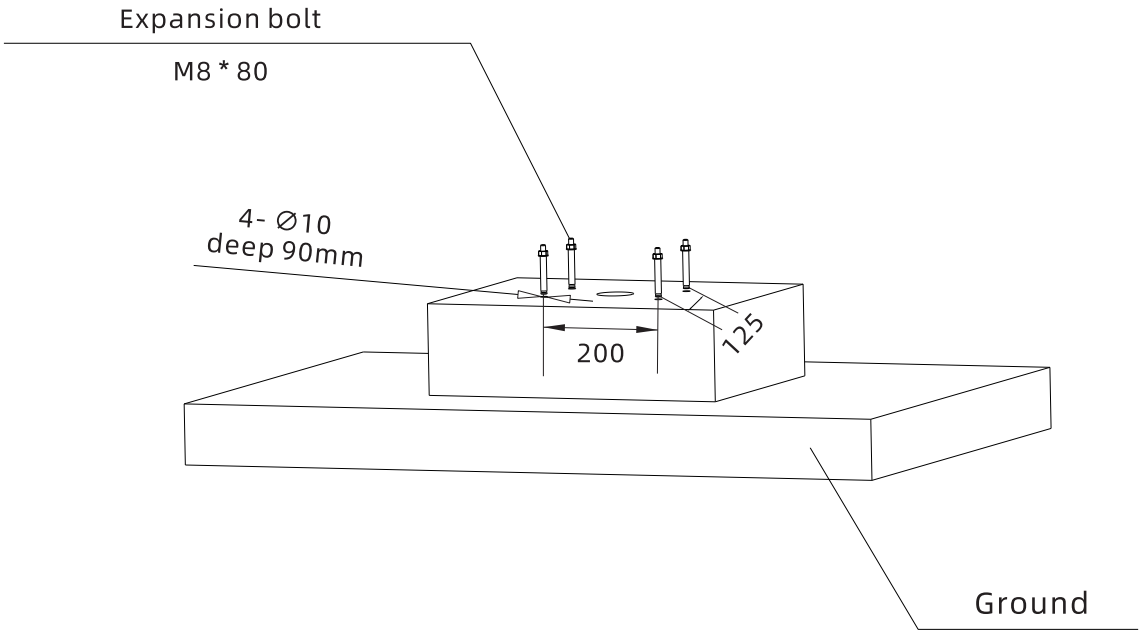
4. According to Chapter 4 Installation and Wiring, correctly connect the cables to complete the entire installation.

Mount on a pole:

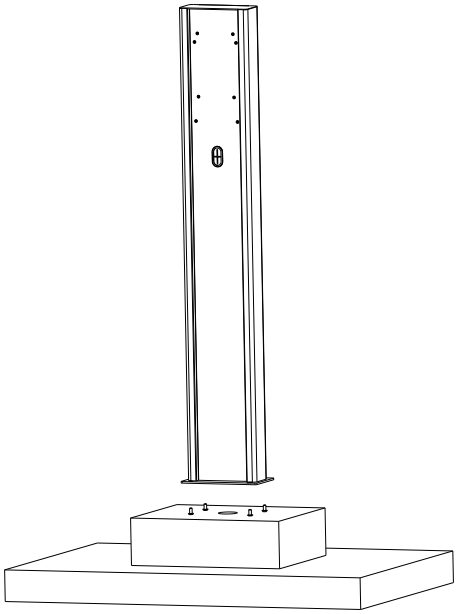
1. Open the packaging of the pole, take out the pole and mounting accessories.



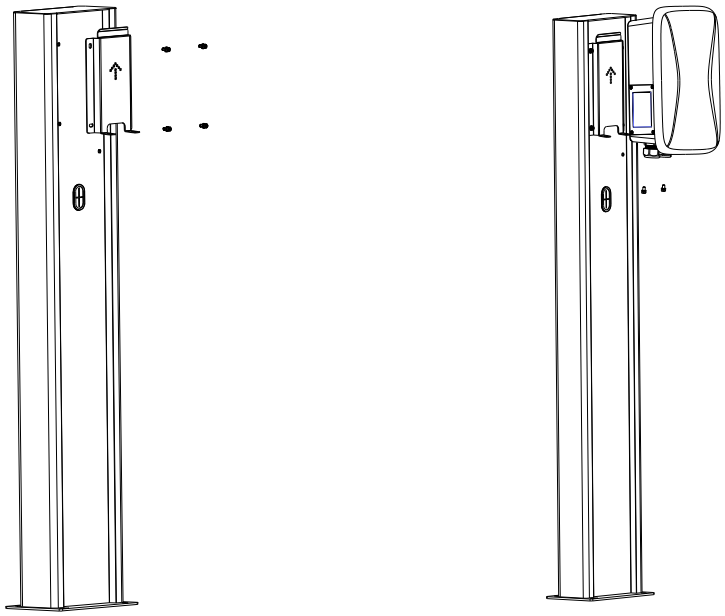
2.The pole must be installed on a hard surface, concrete surface is recommended, it can also be mounted on a solid round. Drill hols according to the requirements marked on the illustration for fixing expansion bolts.



3. Fix the pole onto the holes with expansion bolts. The input cables shall go into the pole from the bottom middle area and come out of it from the area below the cable hooker.



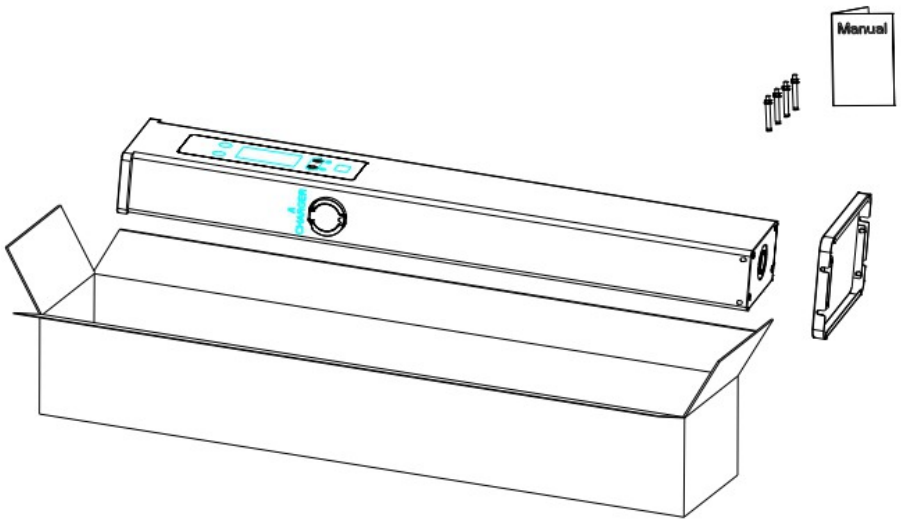
4. Fix the mounting bracket onto the pole.Position the charge point onto the bracket and secure it on the bracket with the 2 screws.



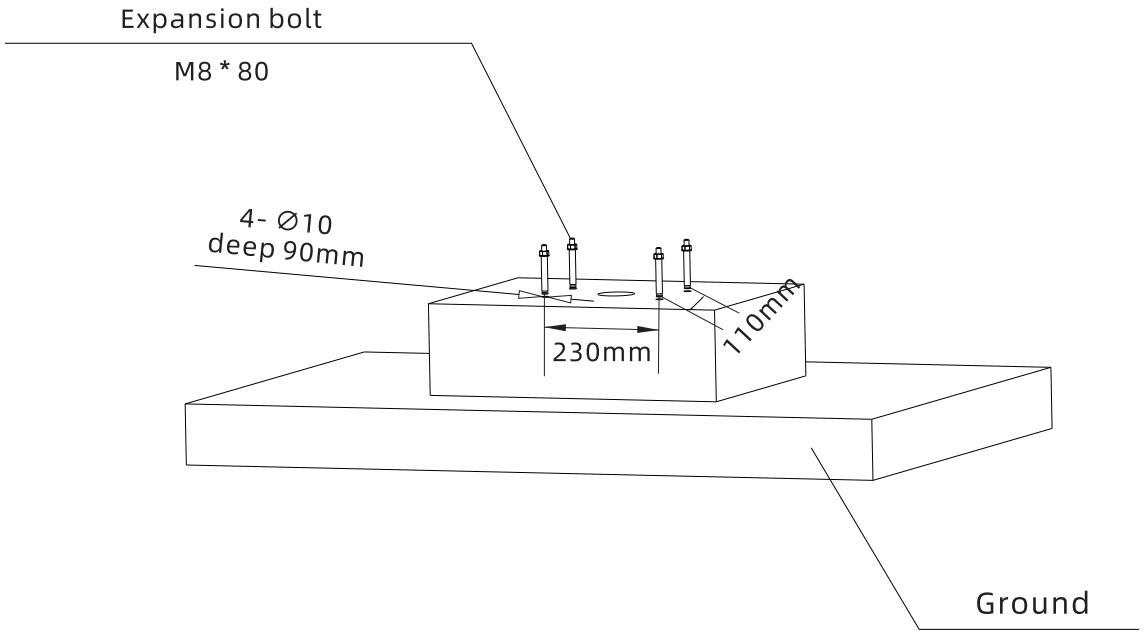
5. According to Chapter 4 Installation and Wiring, correctly connect the cables to complete the entire installation.

Installation on the ground:

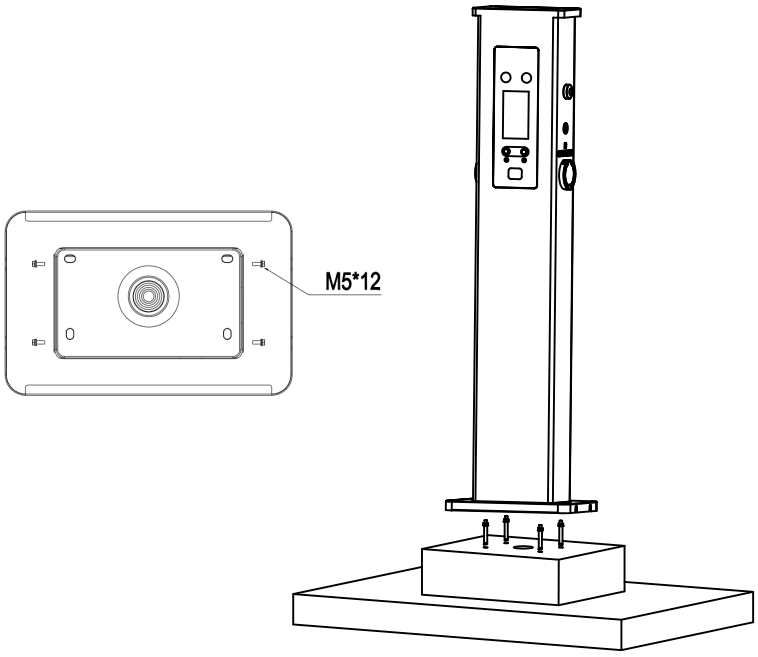
1.Open the packaging, you'll see a charge point, a user manual, a pedestal and a bag of mounting accessories. There is also an RFID card if the charge point is RFID version. For cabled version, a cable hooker is also included inside.



2.The chargepoint must be installed on a hard surface, concrete surface is recommended, it can also be mounted on a solid ground. Drill hols according to the requirements marked on the illustration for fixing expansion bolts.

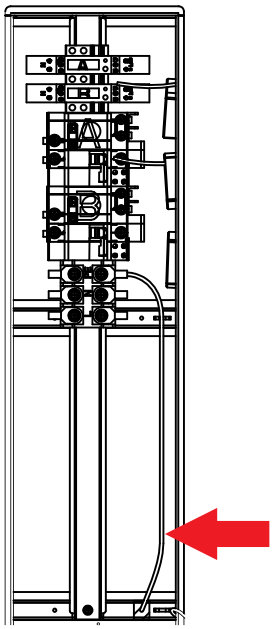


3. Fix the chargepoint onto the holes with expansion bolts. The input cables shall go into the pole from the bottom middle area and come out of it from the area below the cable hooker.



4.According to Chapter 4 Installation and Wiring, correctly connect the cables to complete the entire installation.

5.According to different use scenarios of users, A PE wire is randomly attached to the packaging accessories.(1. For the earth free scenario, the metal shell of the charger does not need to be connected to the PE column, and the PE line does not need to be ignored. 2. For the scene requiring grounding, PE wire needs to be connected to PE row and PE column.)



The position of PE terminal