

AC Charger Pole

User and Installation Manual



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1. Introduction

This user manual describes the safe and correct installation, maintenance, operation and dismantling of the AC Charger Pole.

1.1 Manufacturer Details

Name	Prodrive Technologies N.E. B.V.
Postal address	Science Park Eindhoven 5501
Postal code	5692EM
City	Son
County	The Netherlands

1.2 Product Information

The AC Charger Pole is a robust metal pole designed specifically for facilitating the installation of one or two compatible AC chargers in locations where wall mounting is not feasible. To explore the range of compatible AC chargers, please contact your supplier.

The variants of the AC Charger Pole are designed to be securely installed on concrete surfaces, as well as directly into the ground, ensuring both stability and convenience.

The AC Charger Pole offers two options: the single charger pole for the installation of one AC charger, and the double charger pole for accommodating two AC chargers as illustrated on the next page.



Name	Single Charger Floor Mount	Double Charger Floor Mount	Single Charger Ground Mount	Double Charger Ground Mount
Number of chargers	1	2	1	2
Installation method	Floor mount	Floor mount	Ground mount	Ground mount
Material	Aluminum pole and stainless-steel base	Aluminum pole and stainless-steel base	Aluminum	Aluminum
Finish	Double layer powder coating, RAL 9004		1	
Weight		+- {	5 kg	
Dimensions incl. base [height x width x depth, mm]	1447x167x160	1447x167x160	2003x155x51	2003x155x52



2. General safety information

Please carefully read and adhere to all safety warnings and instructions provided. Neglecting to follow the warnings and instructions outlined below could lead to electric shock, fire, and/or severe injury. We strongly recommend keeping this manual for future reference.

Symbol	Definition	Explanation
Ţ	WARNING	Potential hazardous situation which, if not avoided, could result in death or serious injury.
	Attention	Risk of undesired behavior of the charger.

3. Installation



WARNING: The AC Charger Pole must only be installed by trained and qualified personnel who have thoroughly read this manual.



WARNING: The electrical supply to the installation cables must be switched off before installing the AC Charger Pole until the installation is fully completed.



WARNING: Do not install a damaged AC Charger Pole.

Attention: Check local installation standards for additional requirements to install the AC Charger Pole.

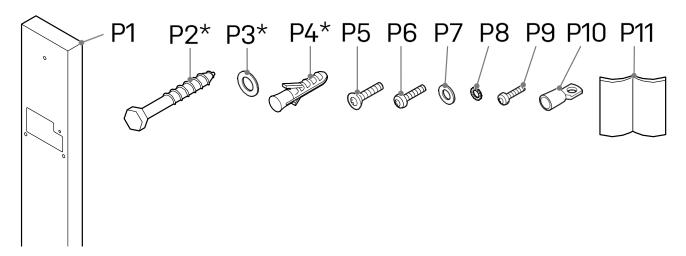
3.1 Unpacking

Remove the AC Charger Pole from its packaging. Verify that the product is undamaged.

Ensure that the local regulations are followed when disposing of the packaging material. Separate the plastic and cardboard waste.



Verify the content of the package:

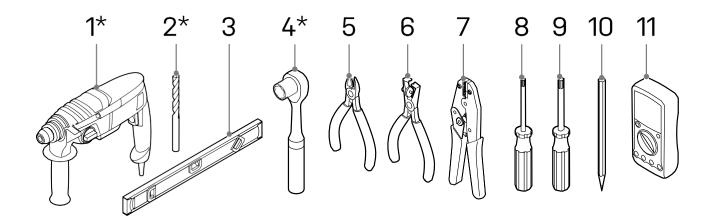


Number	Description	Size	Quantity
P1	AC Charger Pole	-	1
P2	Hexagon head anchoring bolt	8x70	4*
P3	Plain washer for anchoring	M8	4*
P4	Nylon anchoring plug	S10	4*
P5	Countersunk screw for base assembly	M5x20	1 (+1 * *)
P6	Flat head screw for base assembly	M5x16	2 (+2**)
P7	Washer for base assembly	M6	2 (+2**)
P8	Serrated washer for PE assembly	M4	2 (+2**)
P9	Flat head screw for PE assembly	M4x12	1 (+1 * *)
P10	Cable lug for PE assembly	M4, 6 mm ²	2 (+2**)
P11	User and installation manual	-	1

^{*} For floor mount variants only.

^{**} For double charger variants only.

3.2 Required tools



Number	Description	Size
1	Power drill*	-
2	Drill bit*	10 mm
3	Spirit level	-
4	Hexagon socket drive	13 mm
5	Cable cutter	-
6	Wire stripper	-
7	Crimp tool for tubular cable lugs	6 mm ² cable lug
8	Torx screwdriver	T20
9	Torx screwdriver	T25
10	Pencil	-
11	Measuring equipment for PE continuity check	-

^{*} For floor mount variants only.

3.3 Floor mount installation

Follow these steps only for the floor mount AC Charger Pole variants. For the ground mount installation, continue at 3.4.



Step 1: Preparing the surface

- Prepare a flat and level concrete surface or install a plinth.
- Encase protective tubes (1) in the concrete or plinth for the cable routing of the mains power supply and data cables.

Attention: Keep a length of at least 1500 mm above the installation surface for the installation cables.



WARNING: Use installation cables that comply to the local installation requirements for underground installation of the mains power supply.

Step 2: Drilling the holes

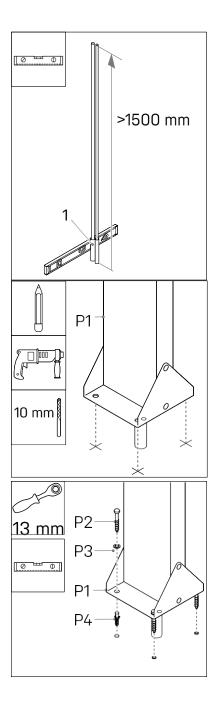
- Route the installation cables through the pole (P1) and place the pole over the protective tubes on the installation surface.
- Mark the four holes of the foot on the installation surface.
- Remove the AC Charger Pole.
- Drill four holes on the installation surface with a drill bit of 10 mm. Drill the holes 70 mm deep.

Step 3: Installing the pole

The plugs and screws in this step are only intended for installation on concrete surfaces.

- Insert the four plugs (P4) in the drilled holes.
- Route the installation cables through the pole (P1) and place the pole on the installation surface.

Mount the pole to the floor using the four bolts (P2) and plain washers (P3). Use a 13 mm hexagon socket drive for tightening the bolts.





3.4 Ground mount installation

Follow these steps only for the ground mount AC Charger Pole variants. For the floor mount installation, refer to 3.3.

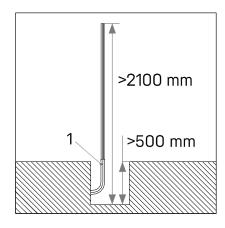
Step 1: Prepare a hole

- Prepare a hole at least 500 mm deep.
- Encase protective tubes (1) for the cable routing of the mains power supply and data cables.

Attention: Keep a cable length of at least 2100 mm from the bottom of the hole for the installation cables.

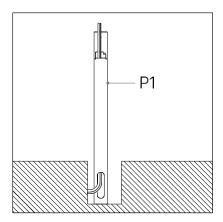


WARNING: Use installation cables that comply to the local installation requirements for underground installation of the mains power supply.



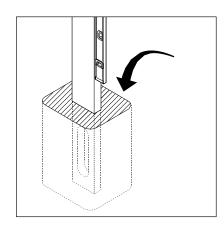
Step 2: Installing the pole

- Route the installation cables through the pole (P1) and place the pole vertically in the hole.



Level the pole and fill the hole. It is recommended to use a mortar mix when filling the hole.

Attention: Make sure that the pole is standing straight and stable.



3.5 AC charger installation



WARNING: Check local installation standards for the regulations for providing protection against electric shock from the AC Charger Pole. It is recommended to ground the AC Charger Pole via the PE terminal inside the AC charger according to the following steps.

Step 1: Preparing PE wire

- Take a PE wire with a length of at least 450 mm.



WARNING: Use a tin plated copper stranded wire with a cross-section of 6 mm².

- Strip the PE wire 10 mm at one end using a wire stripper (1).
- Crimp one cable lug (P10) on the stripped end of the PE wire (1).

Step 2: Preparing the pole

- Assemble the mounting ring (1) to the AC Charger Pole using the countersunk screw (P5). Use a T25 bit to fasten the screw (P5).
- Assemble the PE wire (2) to the AC Charger Pole using the serrated washer (P8) and the flat head screw (P9). Use a T20 bit to fasten the screw (P9).



WARNING: Put the serrated washer in between the lug and the screw.



WARNING: Tighten the fasteners with a torque of 2 Nm.

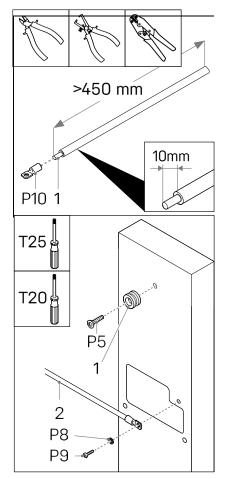


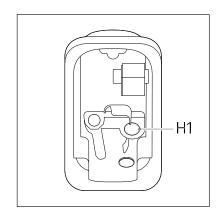
WARNING: Be careful when tightening the screws.

Use a low rotation speed to prevent thread seizing of the stainless steel fasteners.

Attention: Make sure that the PE wire is oriented to the left as shown in the illustration.

- Before proceeding to the next step, follow the instructions of the AC charger installation manual to prepare the AC charger for installation.
- Follow the steps for back hole mains cable installation (H1).





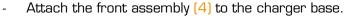


Step 3: Installing the charger

- Route the PE wire and data cables (2) through the peripheral grommet of the charger base.
- Route the mains cable (3) through the back hole of the charger base and seal with the grommet (4).
- Attach the base assembly to the mounting ring (1) and press down firmly.
- Mount the AC charger base to the pole using the washers (P7) and flat head screws (P6). Use a T25 bit to fasten the flat head screws (P6).

Attention: Tighten the fasteners with a torque of 2 Nm.

Attention: Be careful when tightening the screws. Use a low rotation speed to prevent thread seizing of the stainless steel fasteners.



- Route the PE wire to the location of the PE screw (indicated with "PE") on the front assembly.

Attention: Make sure the PE wire is routed below and on the left side of the connector for the power cables (5).

- Cut the PE wire to length.
- Strip the PE wire 10 mm at the wire end.
- Crimp one cable lug (P10) on the stripped end of the PE wire.
- Fasten the PE wire, together with the PE wire for the charging cable or socket (1) to the PE hole of the front assembly, using the screw (3) and serrated washer (2) on the front assembly (4).

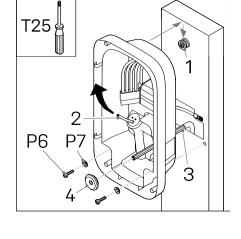
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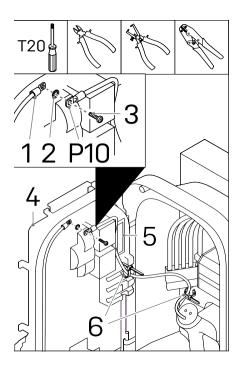
WARNING: Tighten the fasteners with a torque of 2 Nm.

- Fasten the PE wire to the charger base and front assembly using cable ties (6).



WARNING: Perform a PE continuity check before proceeding with the AC charger installation.





Follow the instructions of the AC charger installation manual to complete the installation process.



4. Transportation, storage

Attention: Use the original packaging for transportation, handling, and storage of the AC Charger Pole.

Attention: When moving, transporting, or storing the AC Charger Pole, ensure that this is done within the following allowed temperature and humidity ranges:

Parameter	Specification
Ambient temperature	-40 °C to +85 °C
Relative humidity range	5% to 95%

5. Operation

Attention: Do not apply excessive force to the AC Charger Pole.

Attention: Do not use the AC Charger Pole for other purposes than the installation and operation of compatible AC chargers. Do not install any other equipment in or on the pole.

Attention: When operating the AC Charger Pole, ensure that this is done within the following allowed temperature and humidity ranges:

Parameter	Specification
Ambient temperature	-30 °C to +50 °C
Relative humidity range	5% to 95%

Follow the operation instructions of the AC charger.

6. Inspection, maintenance, and cleaning



WARNING: The AC Charger Pole must only be maintained by trained and qualified personnel who have read this manual.



WARNING: The electrical supply to the AC charger(s) must be switched off before any maintenance work is undertaken.

Attention: Only clean the product with a dry cloth. Do not use aggressive cleaning substances. Do not use a pressure washer.

Although the AC Charger Pole is made from durable materials with a strong powder coating that provides excellent resistance to corrosion, the lifetime of the product is not infinite. Inspect the product on a regular basis and repair or dispose the product when it is not safe to use anymore.



7. Dismantling, disabling, and disposing



WARNING: The AC Charger Pole must only be dismantled by trained and qualified personnel who have read this manual.



WARNING: The electrical supply to the AC charger(s) must be switched off before the AC Charger Pole is dismantled. Follow the decommissioning procedure of the AC charger(s) according to the manual of the AC charger.

Follow the local regulations to properly dispose the AC Charger Pole.

Do not dispose this product in household waste. Instead, dispose this product at a local collection point for metal waste to enable recycling and thus avoiding negative and hazardous impacts on the environment. Ask the municipality or local authorities for respective addresses.

Recycling saves raw materials and energy and makes a major contribution to conserving the environment.

8. Appendix A: Glossary

Abbreviation	Description
AC	Alternating current
PE	Protective earth

Unit	Description
°C	Degrees Celsius
mm	Millimeter
Nm	Newton meter

9. Disclaimer

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