

Power rail

Power rail

Before connecting

The Power rail is a connection box that allows multiple charging posts to be connected in series.

Please pay attention to the earthing system of the charging post, which is described carefully in the following pages.



The Power rail is a product to be installed by an authorized electrician, and a declaration of conformity must always be provided upon completion by your installer.



NB! Turn off the power before beginning the wiring. Use extreme caution and follow instructions carefully.

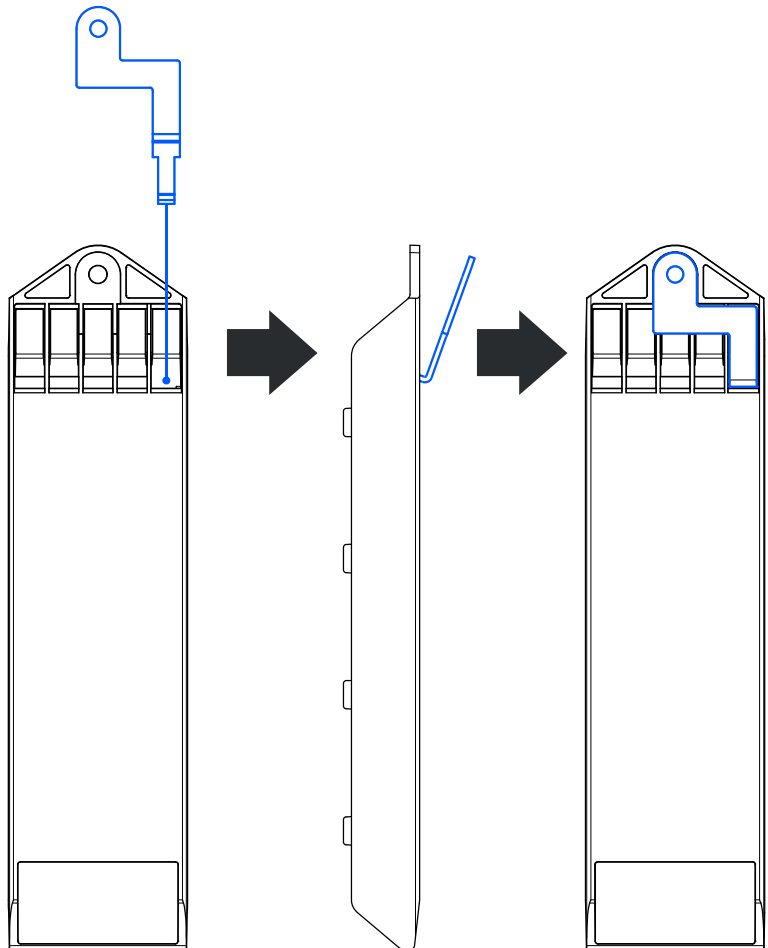
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Power rail

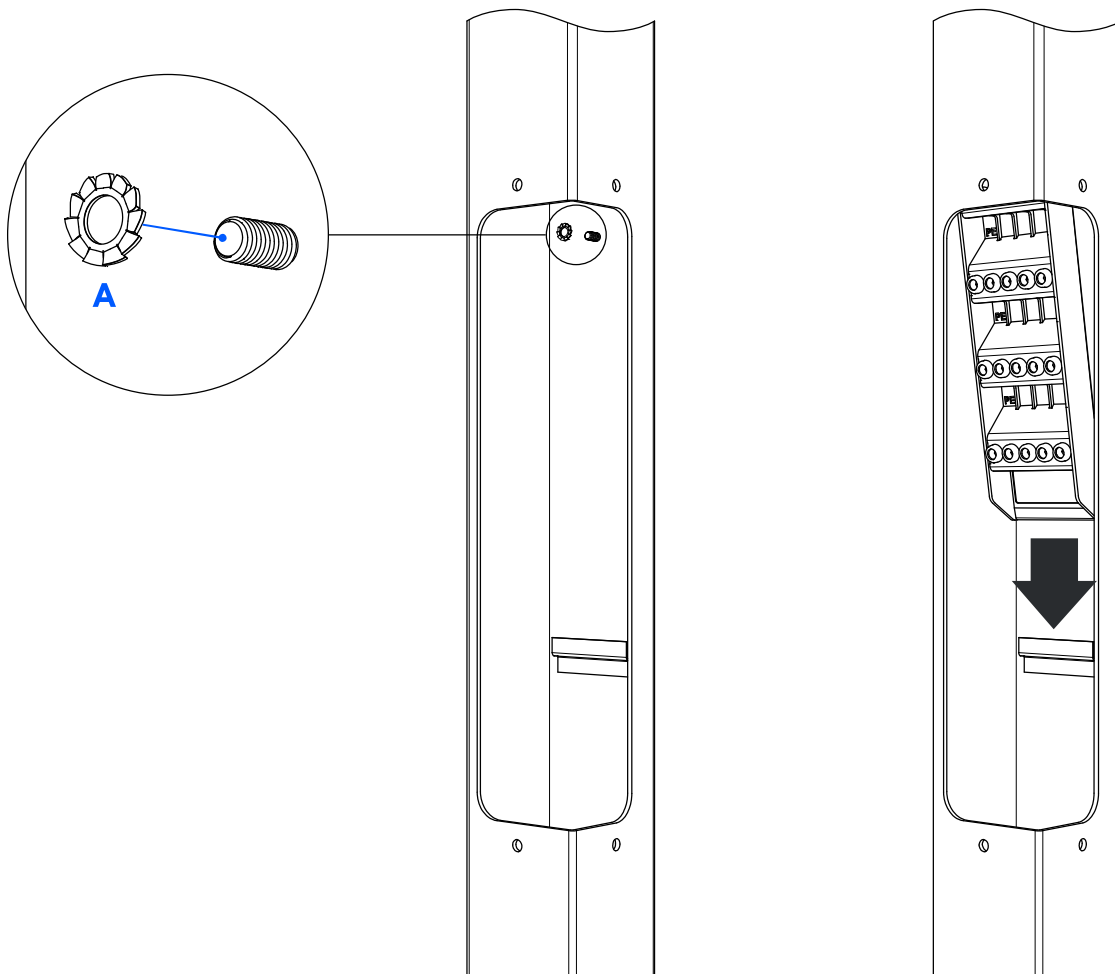
Ground connection plate

Before installing the Power rail make sure to apply the ground connection plate. The plate is essential for connecting the post to the protective earth (PE).

1. Make sure the top PE terminal screw is open, then wedge the end of the plate into the terminal from the back. The ground connection plate should lie flat to the plastic housing.



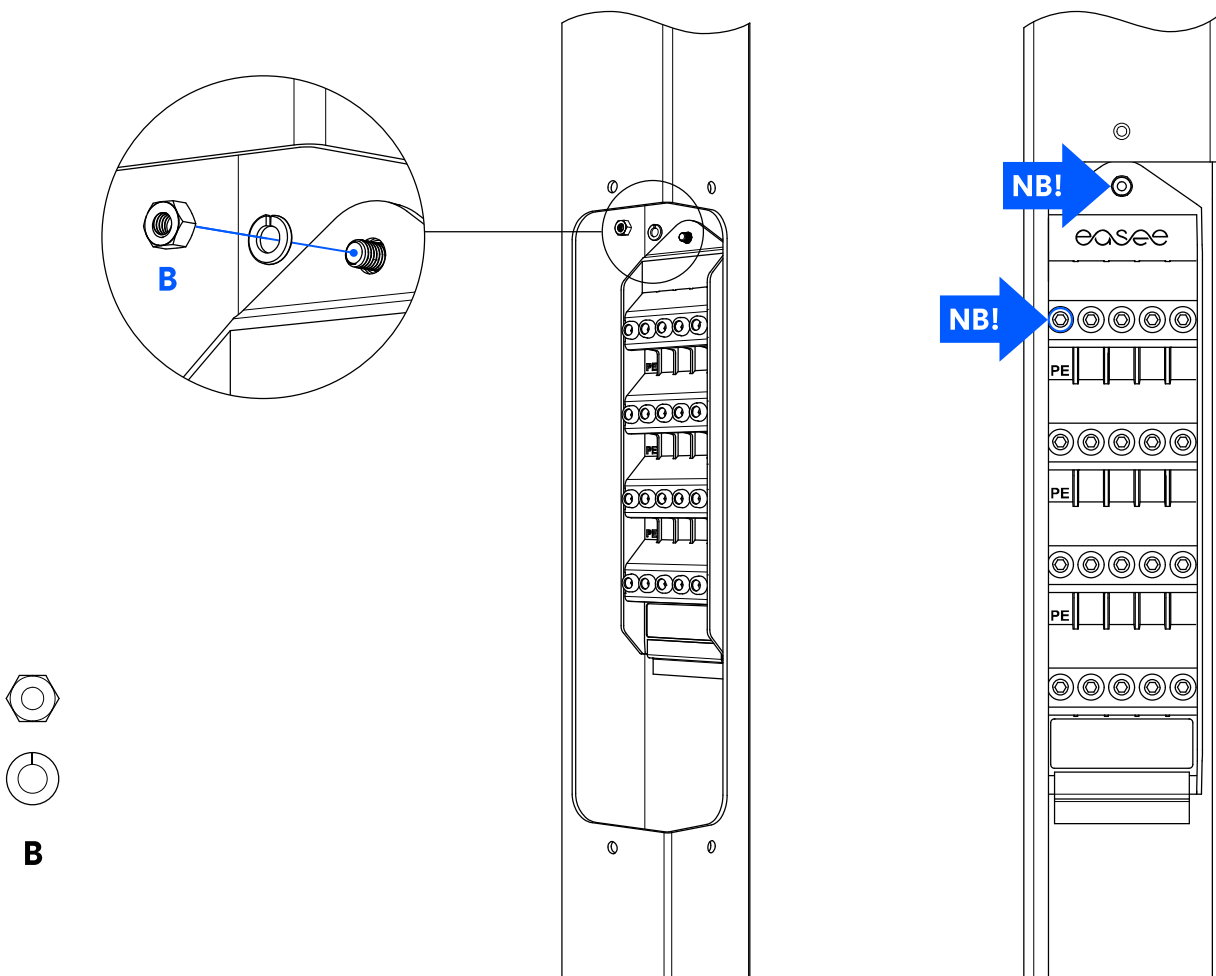
2. Insert the serrated washer on the rod inside the column. It should be placed between the metal column and the Power rail.
3. Slide the Power rail with the ground connection plate inside the column and latch the bottom of the rail into the catch.



4. Fasten the grounding nut with the spring washer on the rod.

NB! In order to complete the PE connection, the grounding nut has to be fastened and the top PE terminal screw has to be tightened (regardless of whether there is a wire in it or not).

Important! Do not forget this step!

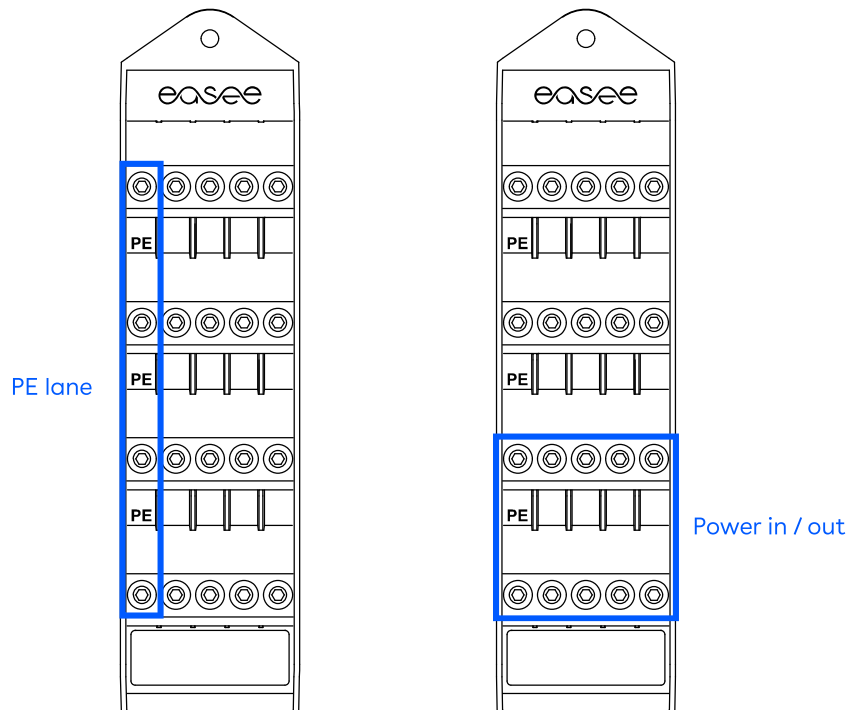


2 Power rail Terminals

The ground connection plate connects the entire leftmost lane to the metal column, so it is very important that this lane is **only** used for PE connections.

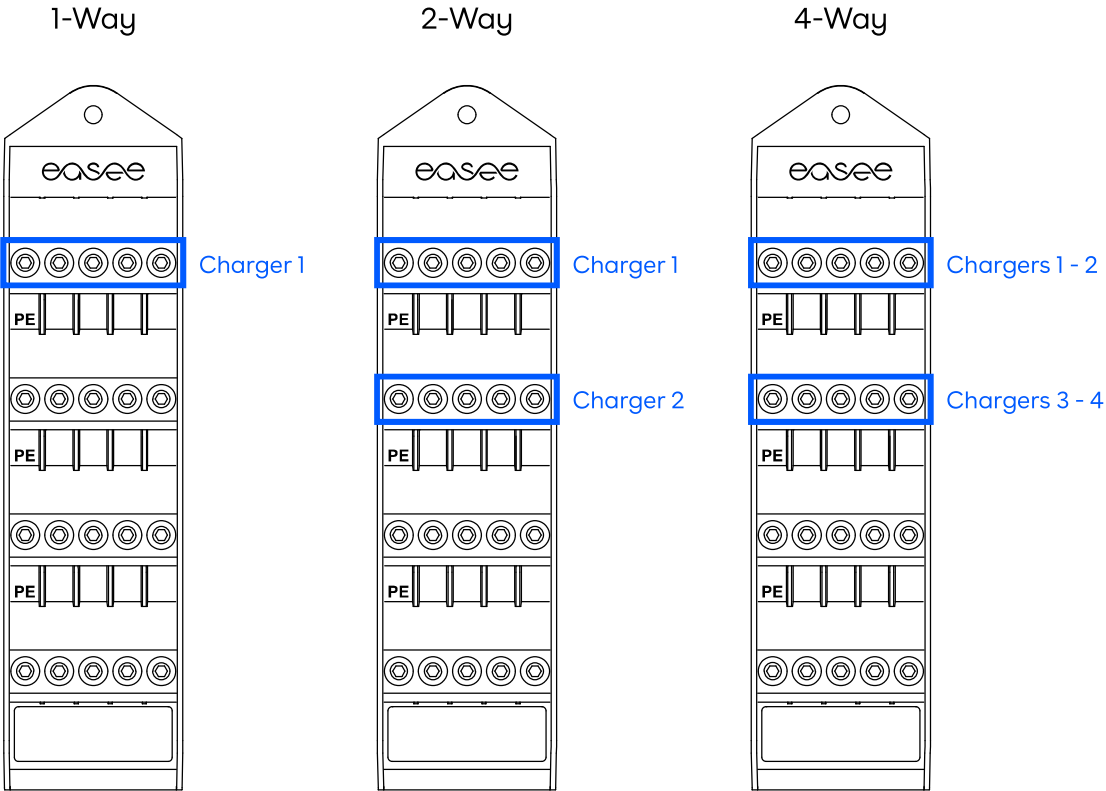
We recommend using the two lower terminal sets for the main power cables.

One set of terminals is used for power in and the other is used for power out, if you want to connect another charging post on the same cable. Wire size up to 25mm².



We recommend using the two upper terminal sets for the charger cables.

For a single charger, only one set of terminals is used, for two chargers both sets of terminals are used and for four chargers two wires have to share each terminal in both sets. Wire size up to 6mm².

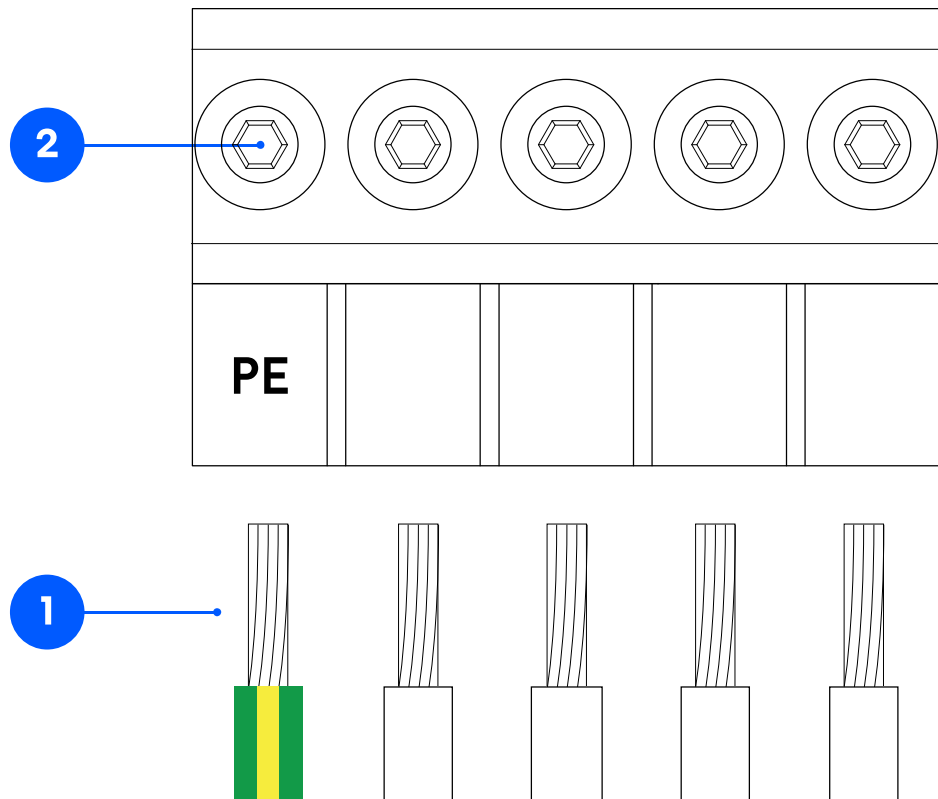


3 Power rail Wiring

The Power rail has 5 lanes. This allows support for TN and IT three and one phase electrical grids.

1. All cable cores must be stripped back allowing 12mm exposed conductor. If needed, we recommend using insulated cable end sleeves.
2. Tighten the screws with a torque of 5Nm.

NB! Terminations should be visually and mechanically inspected before mounting the Side panel.

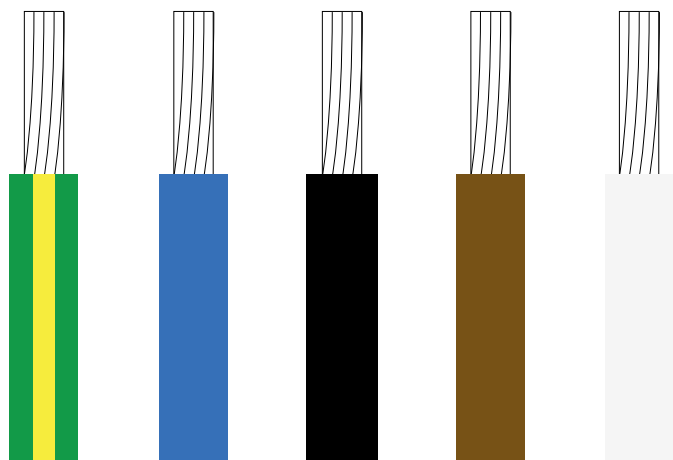
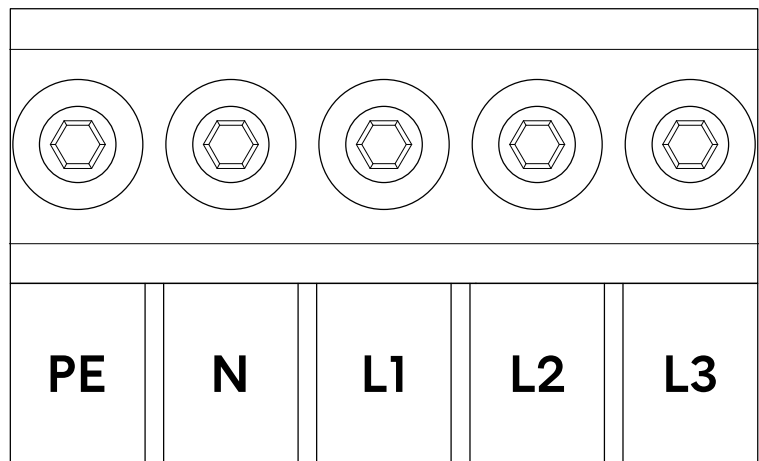


Wiring

TN 3-phase

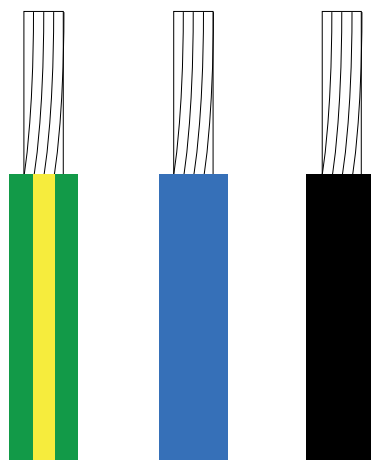
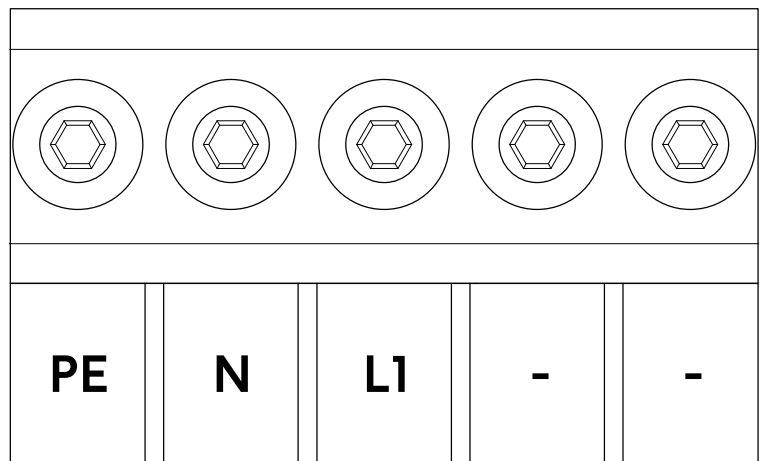
TN is the most common grid type in Europe. It uses five conductors to provide both 230V and 400V. This makes it very efficient and therefore the preferred grid type for charging EV's.

Depending of the age and nationality of your cables, the colours of the cables can vary from the illustration below. Therefore, please make sure that the conductors are correctly terminated before applying power.



Wiring

TN 1-phase

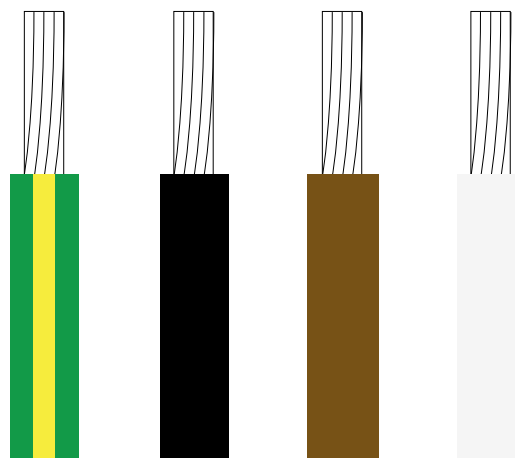
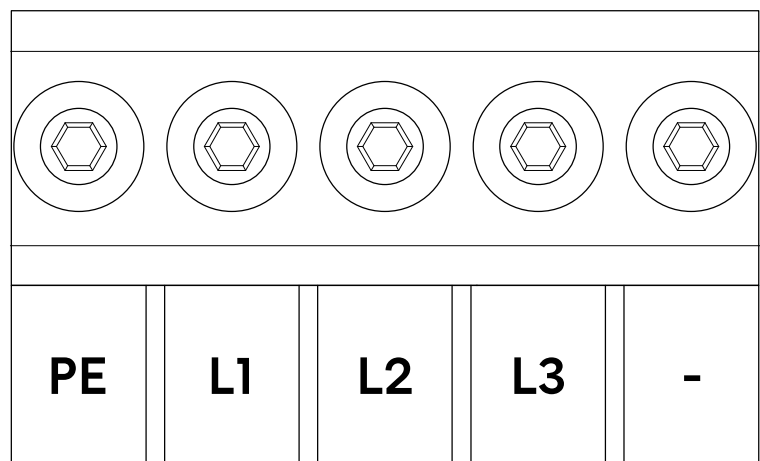


Wiring

IT 3-phase

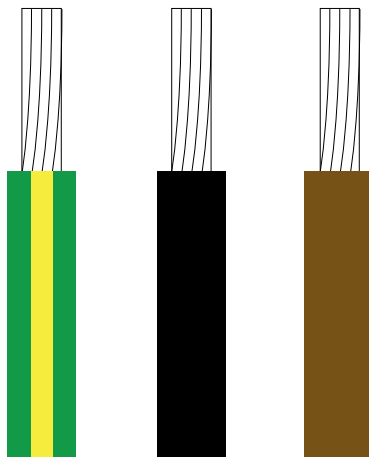
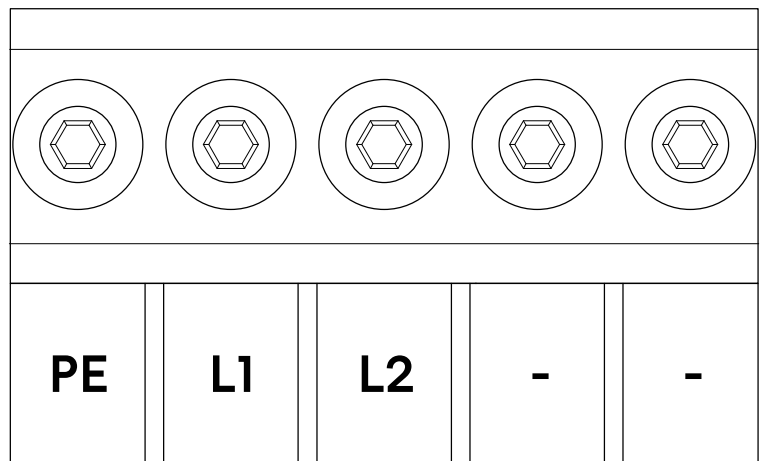
IT grid is mostly used in Norway and Albania, but it can also be found in Belgium, France and Spain. IT grid has no neutral connector and uses only 4 conductors. Therefore it can only provide 230V (across the phases).

Depending of the age and nationality of your cables, the colours of the cables can vary from the illustration below. Therefore, please make sure that the conductors are correctly terminated before applying power.



Wiring

IT 1-phase

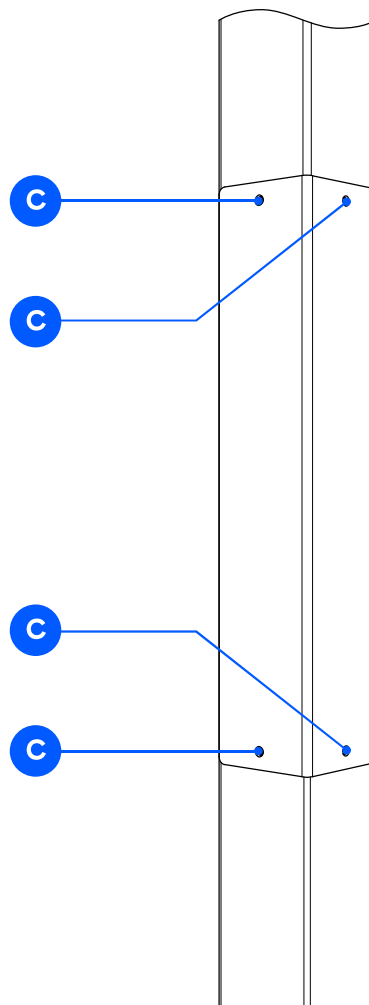


4 Power rail Side panel

After connecting all wires to the Power rail, it is time to mount the Side panel with the 4 button screws.



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Recommendations

Foundation

This charging post usually needs a mechanical foundation to be installed. The Adapter plate is compatible with most 160x160 center to center foundations. We recommend foundations similar to Ørstafundament: H=750mm c/c 160mm.

In some situations, it is also possible to use the smaller base of the column directly without the Adapter plate, in this case using a 70x70 center to center footprint.

Screws

For all the countersink and button screws we recommend 7-9Nm of torque.

All screws except the "U6 Hex Socket" fit a T25 tool. This also goes for the terminal screws in the Power rail as well as in the Easee charger.

Protection

Although this charging post can withstand extreme weather conditions, we do not recommend using high pressure water jet for cleaning.

It is advisable to have an extra protection around the post when mounted in an open parking space.



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