Installations- und Konfigurationsanleitung — eCharge Hardy Barth cPµ2 Pro

Version:2023.3.1

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1. Introduction

1.1. Legal provisions

The information contained in these documents is the property of FENECON GmbH. Publication, in whole or in part, requires the written consent of FENECON GmbH.

Subject to changes and printing errors!

1.2. Qualification of the installing electrician

A qualified electrician is a person who has the necessary experience and training:

- Setting up, switching on, switching off, disconnecting, short-circuiting and repairing circuits and devices
- Standard maintenance and use of protective devices in accordance with current safety standards
- First aid/emergency care
- Current knowledge of local regulations, standards and guidelines

1.3. Symbols used

Before reading the manual, you should familiarize yourself with the different types of safety warnings. You should also familiarize yourself with the importance of the safety warnings.

1.4. Darstellungskonventionen

	This symbol indicates an imminent danger. If this danger is not avoided, it can lead to death or serious injury.
	This symbol indicates a potentially dangerous situation. If this dangerous situation is not avoided, it may result in minor or moderate injury.
	This symbol indicates a warning. Failure to observe this warning may result in damage and/or destruction of the system.
	This symbol indicates a note. It is recommended that the note be observed.

Table 1. Darstellungskonventionen

2. Product description

2.1. Scope of delivery

Prüfen Sie, nachdem Sie die Lieferung erhalten haben, ob alle Bestandteile mitgeliefert wurden. Prüfen Sie den Lieferumfang auf Beschädigungen. Sollte etwas fehlen oder beschädigt sein, wenden Sie sich bitte sofort an den Lieferanten. Folgende Komponenten sind in der Lieferung enthalten:

- eCharge Hardy Barth cPµ2 Pro charging station
- eCharge MID meters
- 11 kW, integriertes 4-Meter-Spiralkabel mit Typ-2-Stecker (IEC 62196-2)
- Installations- und Konfigurationsanleitung — Typ-2-Ladestation "eCharge Hardy Barth cPµ2 Pro"
- Handbuch — "Ladestation cPµ2 Pro"

Das RS485-Zweidrahtkabel, welches für den Anschluss der Modbus-/RTU-Kommunikationsverbindung zum Zähler notwendig ist, ist nicht im Lieferumfang enthalten!

2.2. Prerequisites

The following is required to use the charging station:

- FEMS App eCharge Hardy Barth cPµ2 Pro Ladestation

Die »FEMS App eCharge Hardy Barth cPµ2 Pro Ladestation« ist nicht im Lieferumfang enthalten. Diese muss — falls noch nicht vorhanden — zusätzlich erworben werden.

3. Commissioning

	To install the Hardy-Barth charging station, please follow the instructions in the "Installation and operating instructions cPµ2 charging station". Operating instructions cPµ2 German (v1.0)
	The "Configuration Manual" for the Salia board should also be read and internalized: Configuration manual — Salia board

This quick guide refers to the original user manuals.
It serves as an installation aid for qualified electricians in the area of communication interfaces, but is not a substitute for studying the user manuals.

The plug connection for the LED display can be disconnected if required. This makes it easier to work on the charging station during commissioning.

We recommend checking the plug connection to the left of the Ethernet port on the Salia board, as in our experience this is often loose.

Once the charging station has been installed and configured, it must be connected to the customer network via the network interface (LAN) on the Salia board.

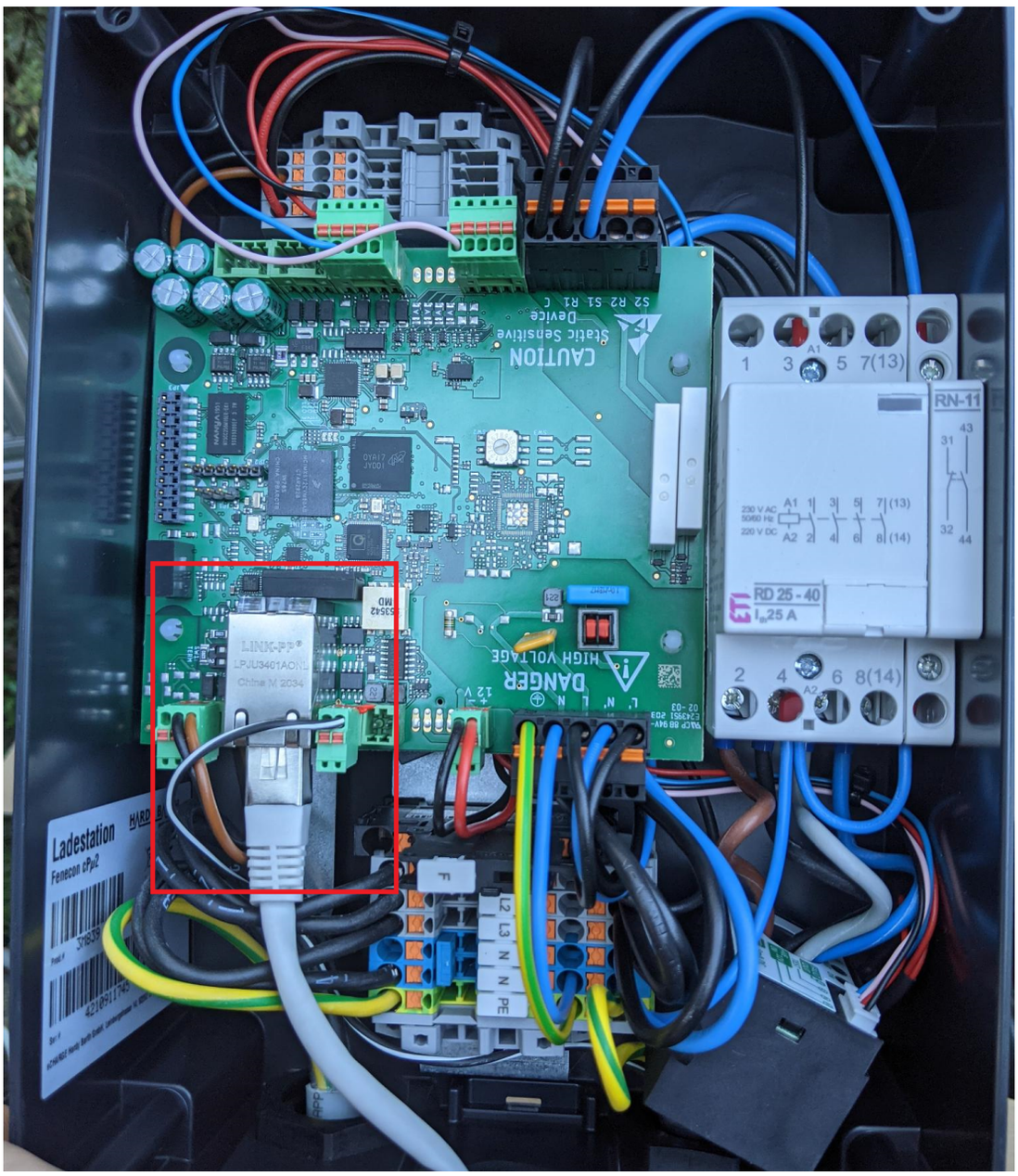


Figure 1. Network interface (LAN) - Salia board

3.1. Connecting the meter

Connect the meter as shown below:

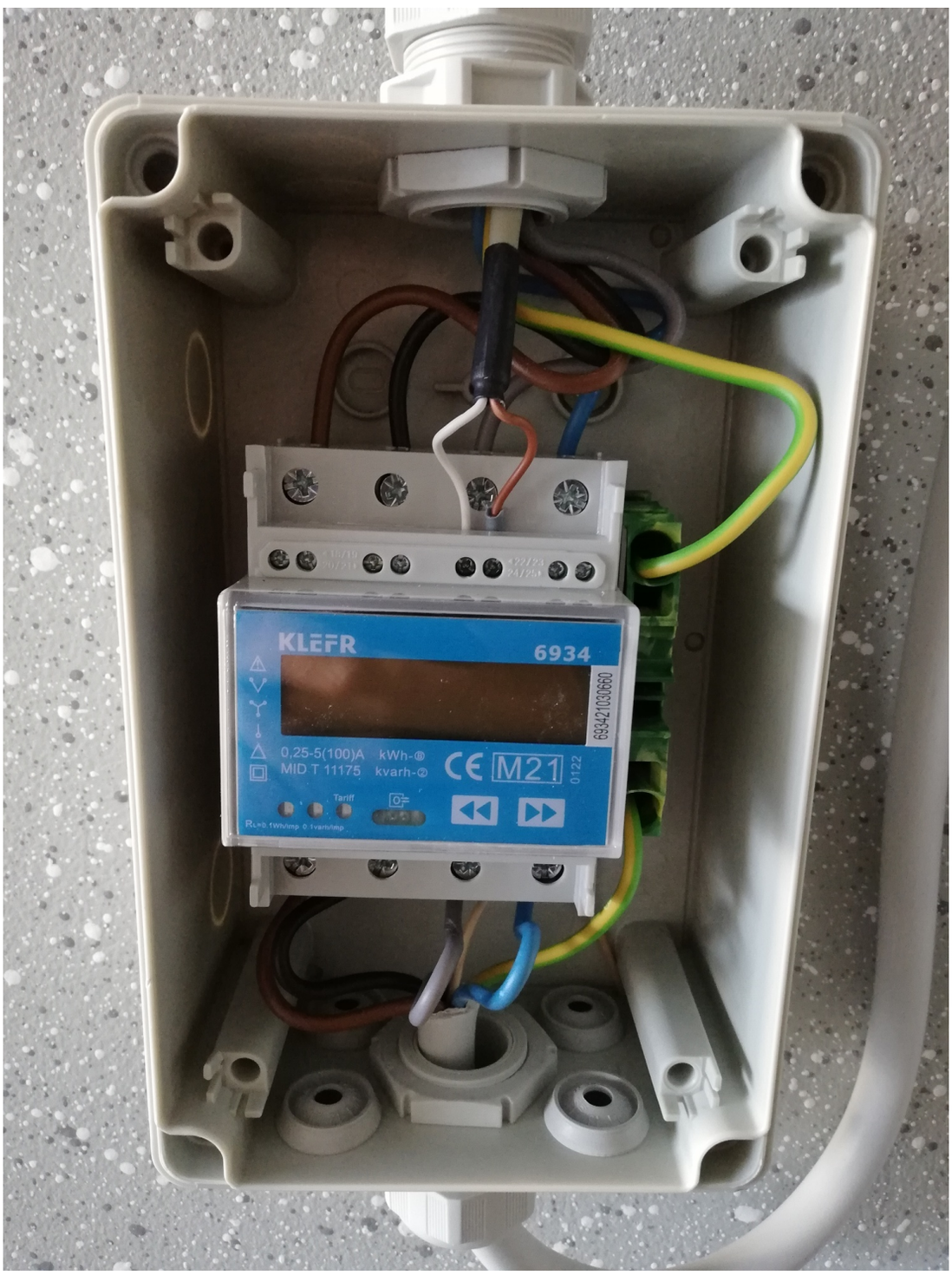


Figure 2. Connected meter

Use the enclosed instructions for this:

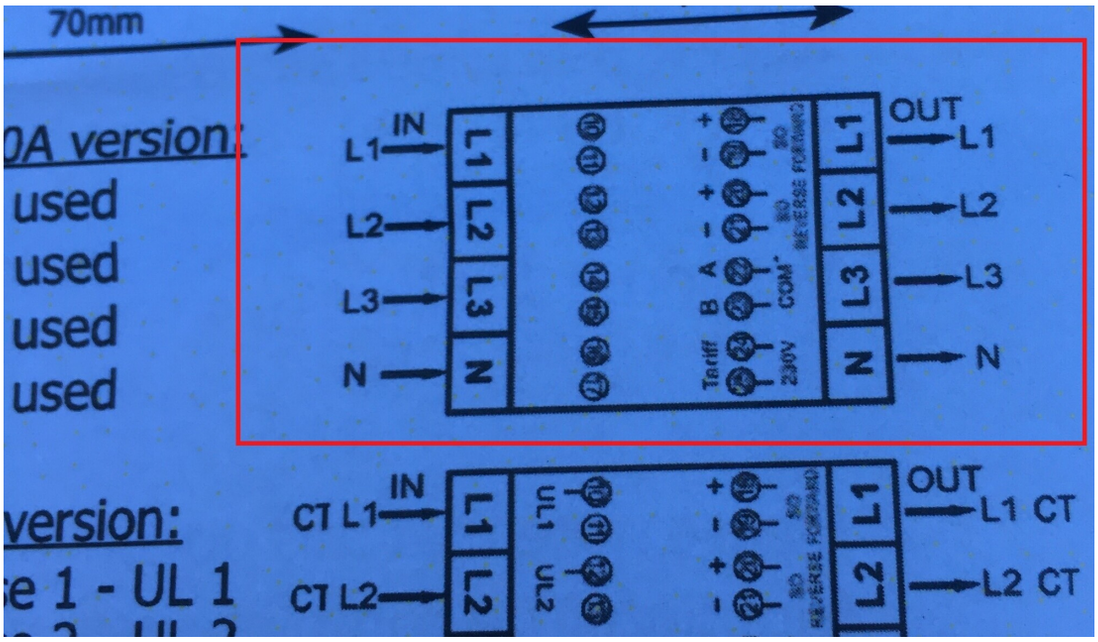


Figure 3. Meter connection

Make sure that the meter is installed the right way round: *OUT* must point towards the charging station, *IN* towards the sub-distribution board.

Establish the communication connection to the meter as follows:

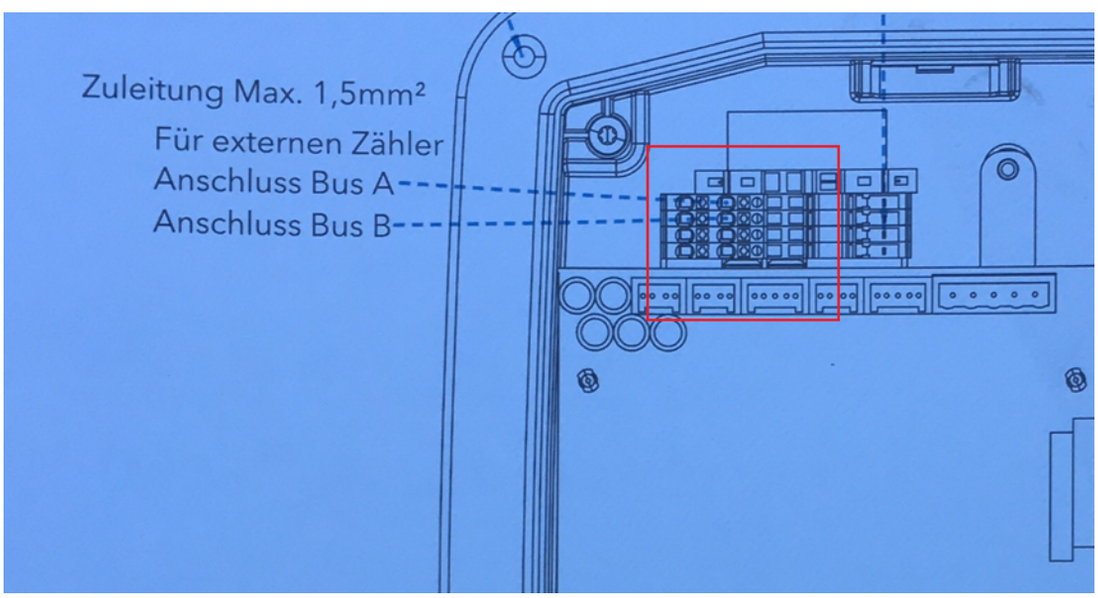


Figure 4. Establishing the communication connection

The negative contact of the cable must be connected to contact A on the meter and to contact 22 (top) on the Salia board. The positive contact of the cable must be connected to contact B on the meter and to contact 23 (bottom) on the Salia board.

3.2. Configuration

By default, the charging station can be reached under the IP address `192.168.25.30` (or `169.254.12.30`).

To reach the charging station from your notebook/PC, it is necessary to set up a static IP address in the same subnet (e. g. `192.168.25.1`) in the network adapter settings.

1. To do this, connect the Salia board to your device (here: notebook) via the RJ45 socket, as shown below:

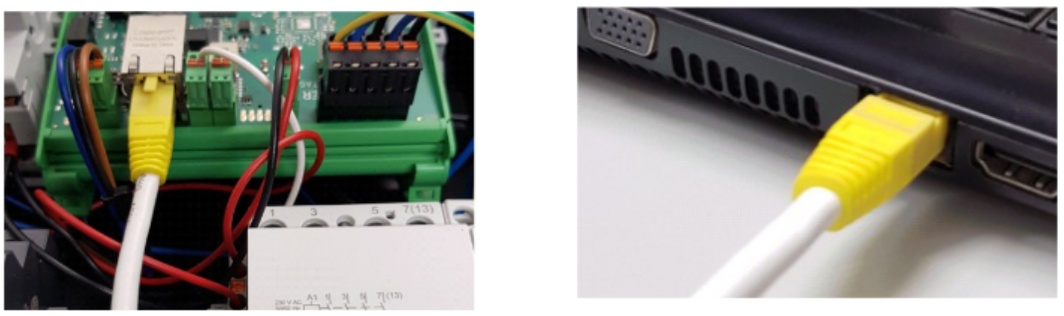
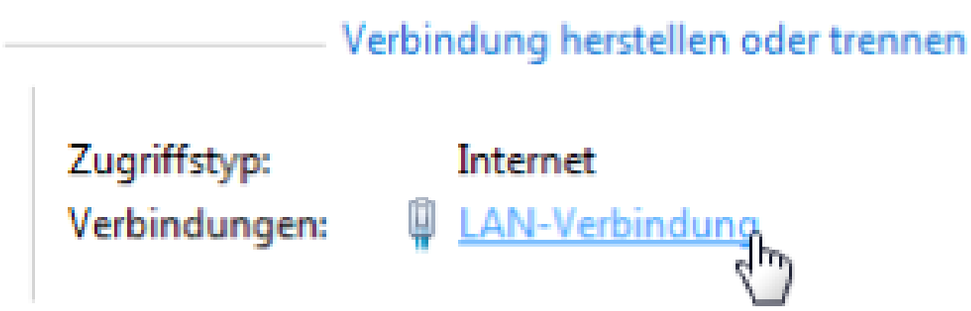


Figure 5. Connecting the Salia board to the notebook

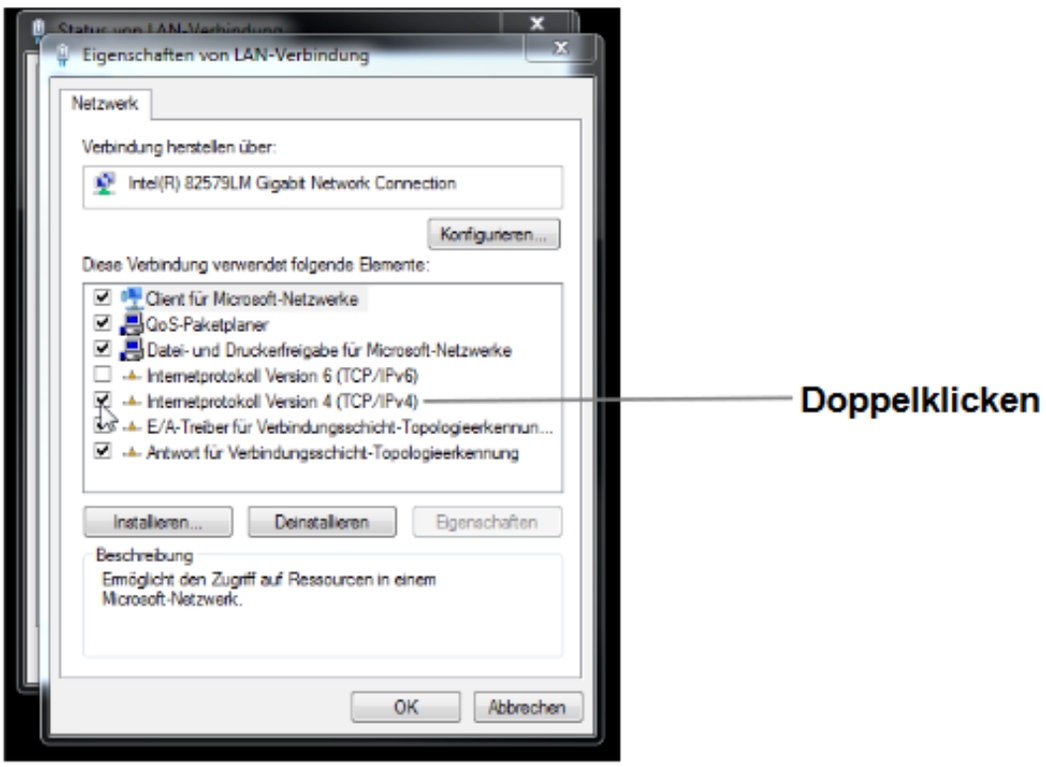
2. Open your web browser to access the web interface. To do this, enter the following IP address: `192.168.25.30`

If problems occur in step 2, proceed as follows:

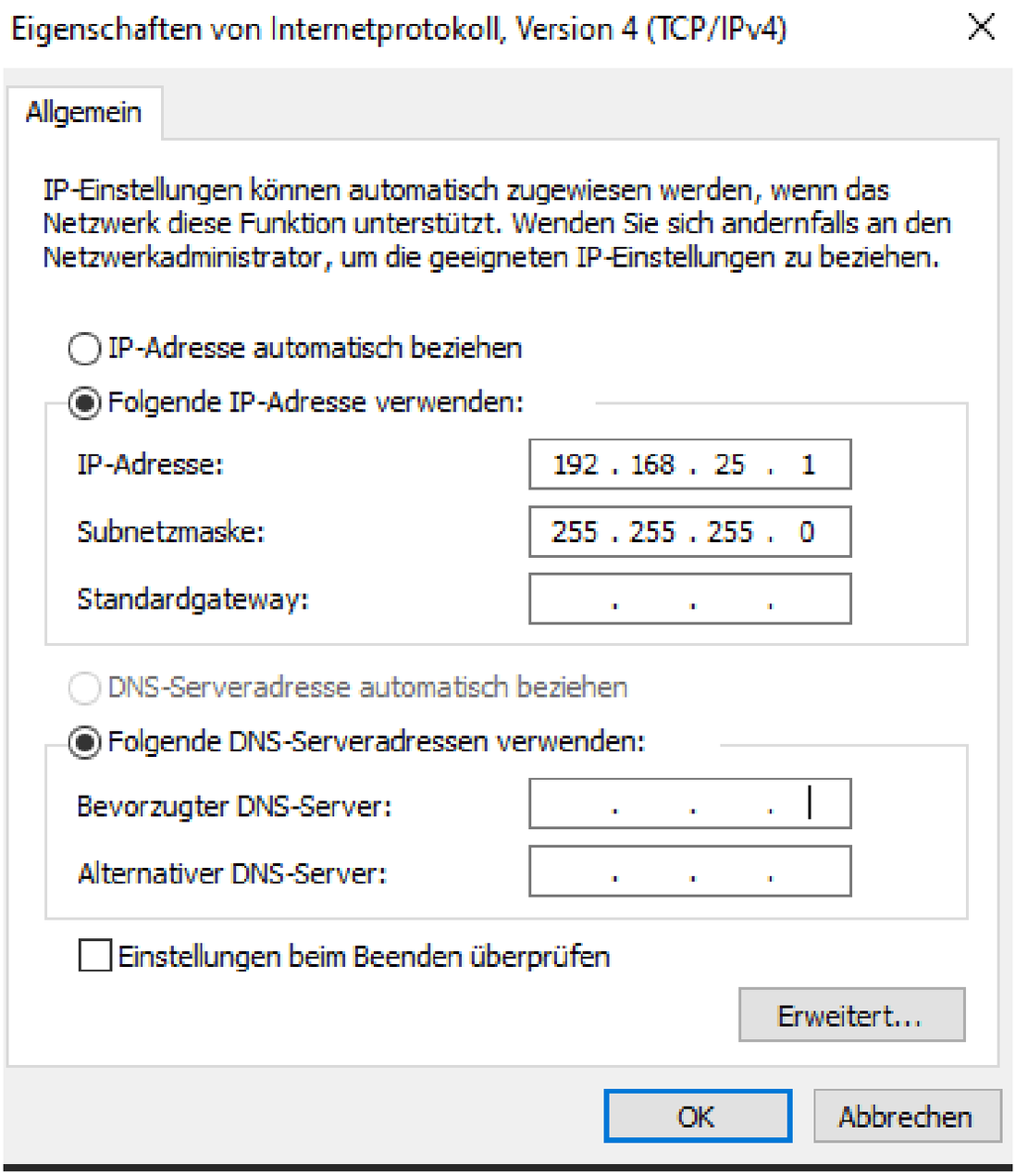
1. Open the "Network and Sharing Center" under the system settings of your PC.
2. Click on LAN connection.



3. In the newly opened window, click on Properties
4. In the new window, double-click to open the "Internet Protocol Version 4 (TCP/IPv4)" item (see graphic).
   Alternatively, select "Internet Protocol Version 4 (TCP/IPv4)" in the open window and then click on "Properties"



5. In the next window, select "Use the following IP address" to enter the IP address `192.168.25.1` and the subnet mask `255.255.255.0` as shown in the picture below. The entries for the DNS server can be left blank.



6. Confirm the entries. Then switch off the power to the wallbox once, wait a few seconds and allow the wallbox to reboot.

The charging station can then be configured via the web interface. To do this, enter the IP address of the charging station (`192.168.25.30`) in the address bar of the browser. The web interface then appears as shown below:

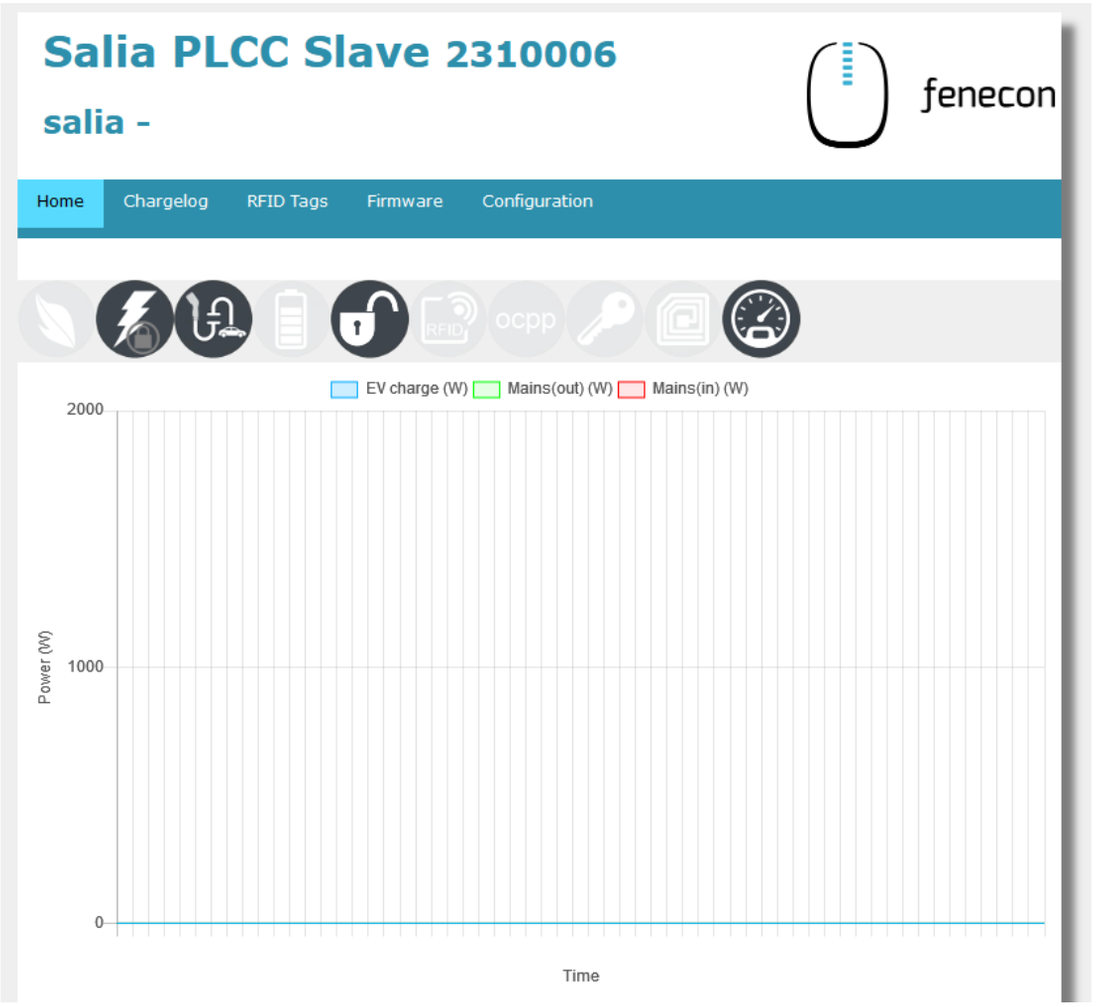


Figure 6. Web interface

The network settings can be checked here:

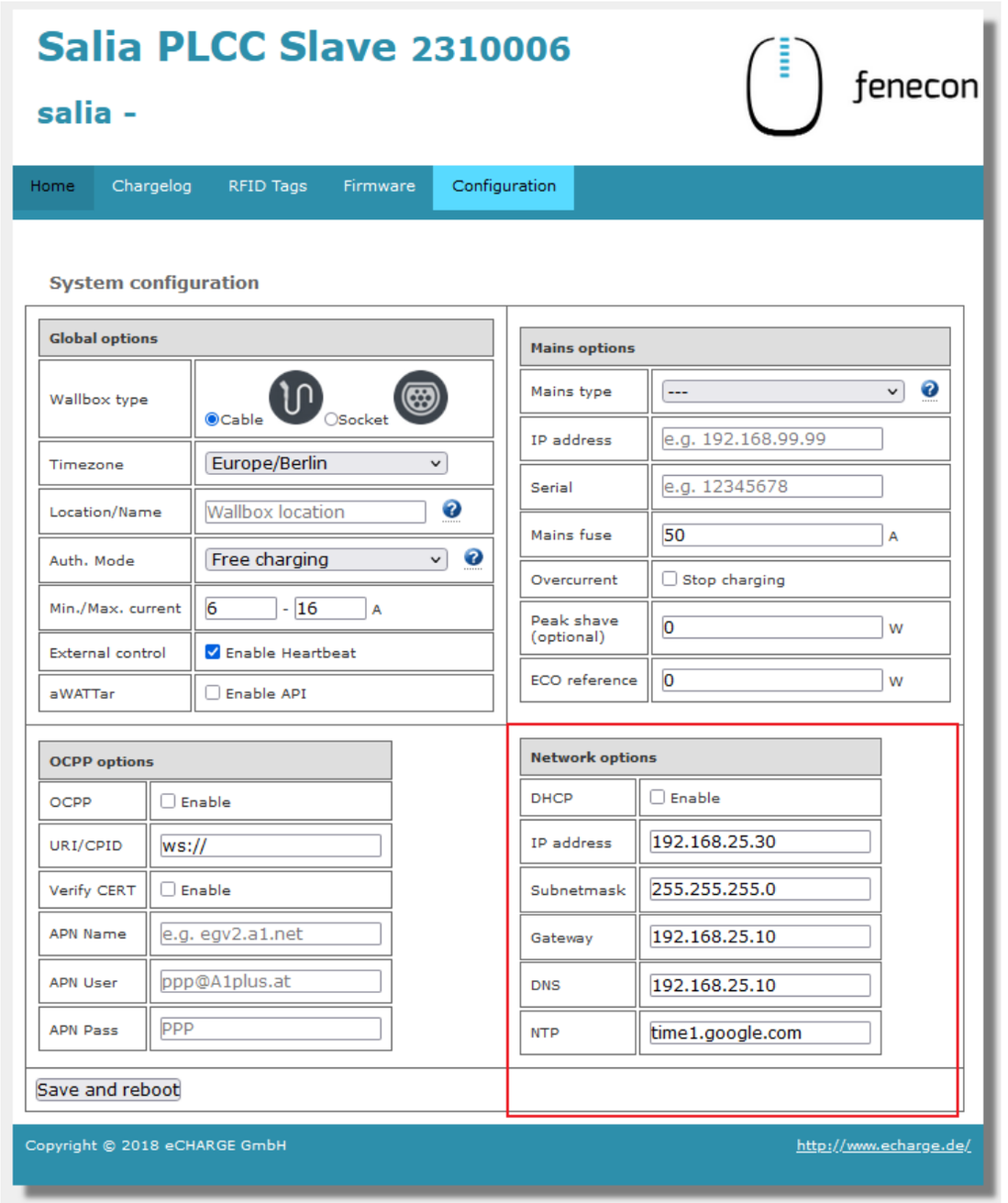


Figure 7. Network settings

3.3. Configuration of the meter

It must be ensured that the meter is activated:

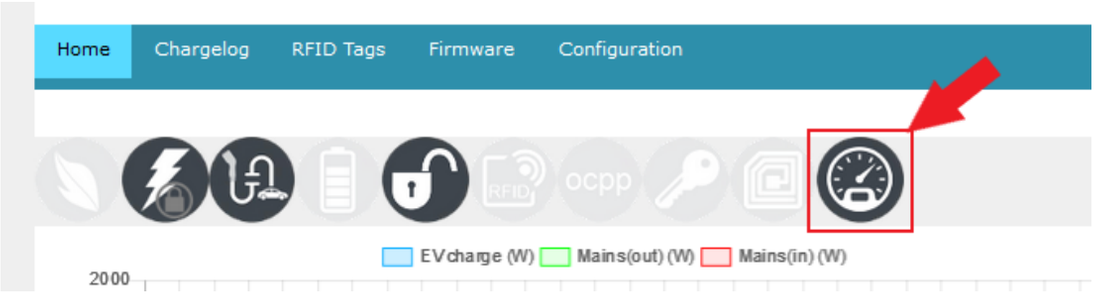


Figure 8. Meter

If this is not the case (grayed out symbol), it must be activated manually. To do this, double-click in the free area next to *System configuration*:

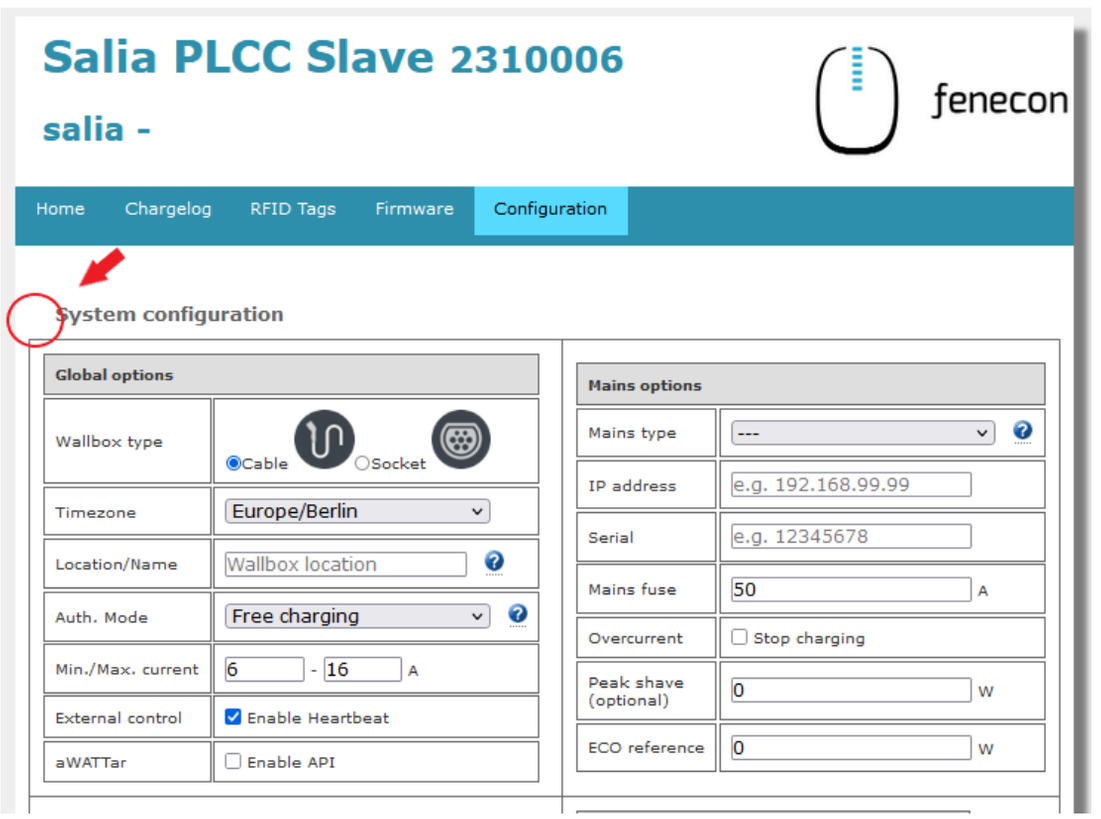


Figure 9. Hidden menu

3.3. Configuration of the meter

An extended view with further configuration options then opens. The meter can be activated under *Advanced Options*:

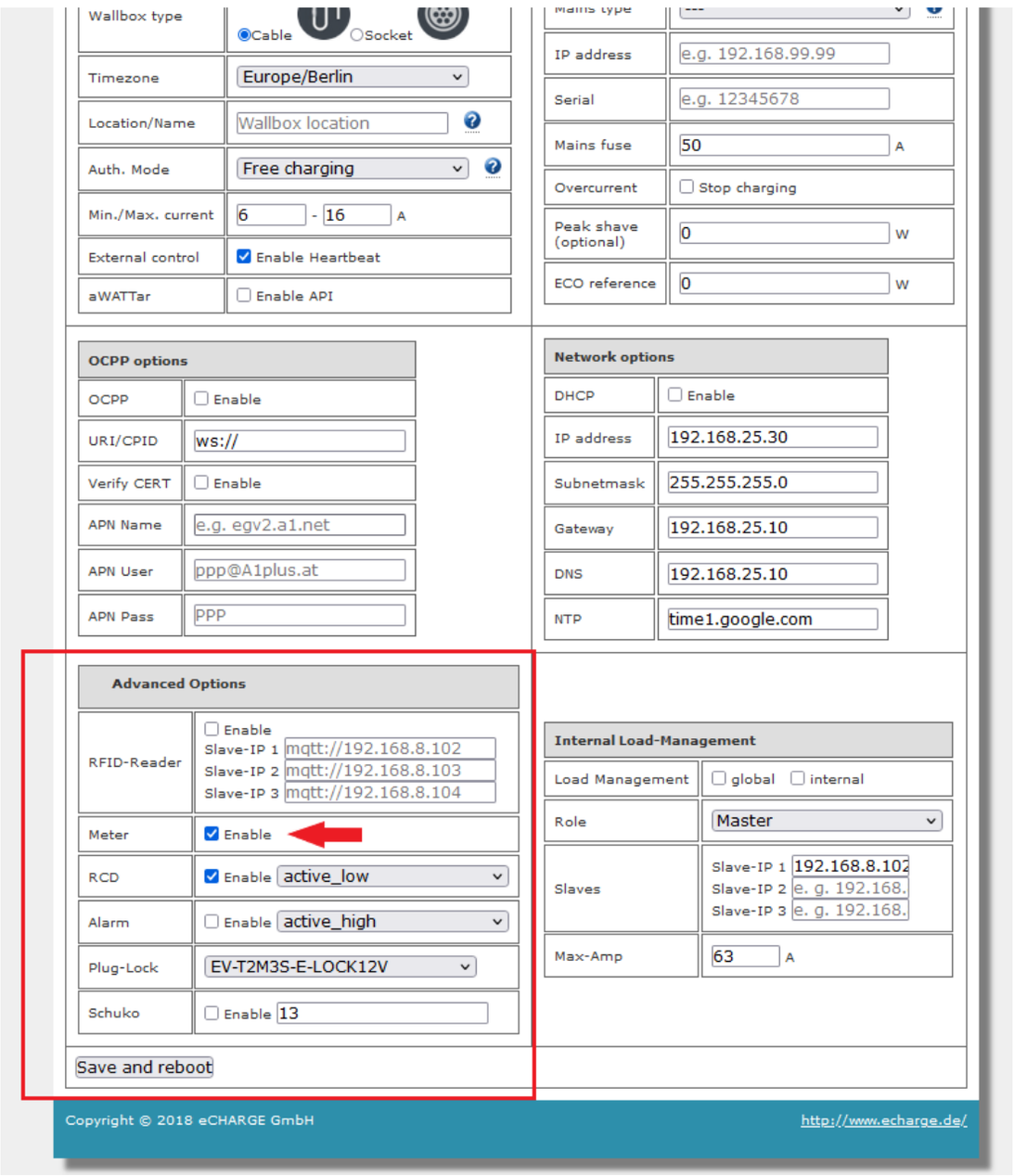


Figure 10. Meter activation

If no meter values are displayed in the FEMS Online Monitoring, please check whether the correct meter has been selected.

Double-click on the cogwheel next to *Advanced Options* to do so:

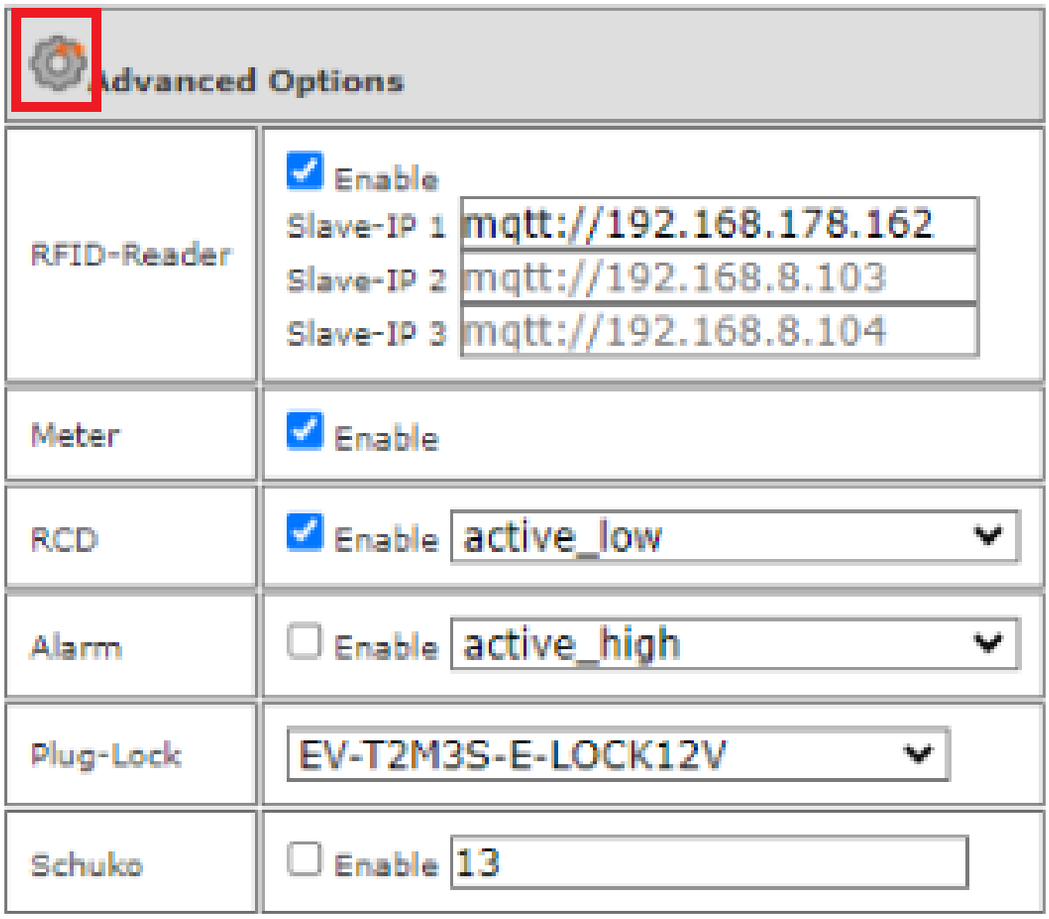


Figure 11. Advanced options

An extended view then opens with further configuration options for meters and RFID cards.

Please check that the correct meter has been selected under *Advanced Meter Options* under *Protocol*.

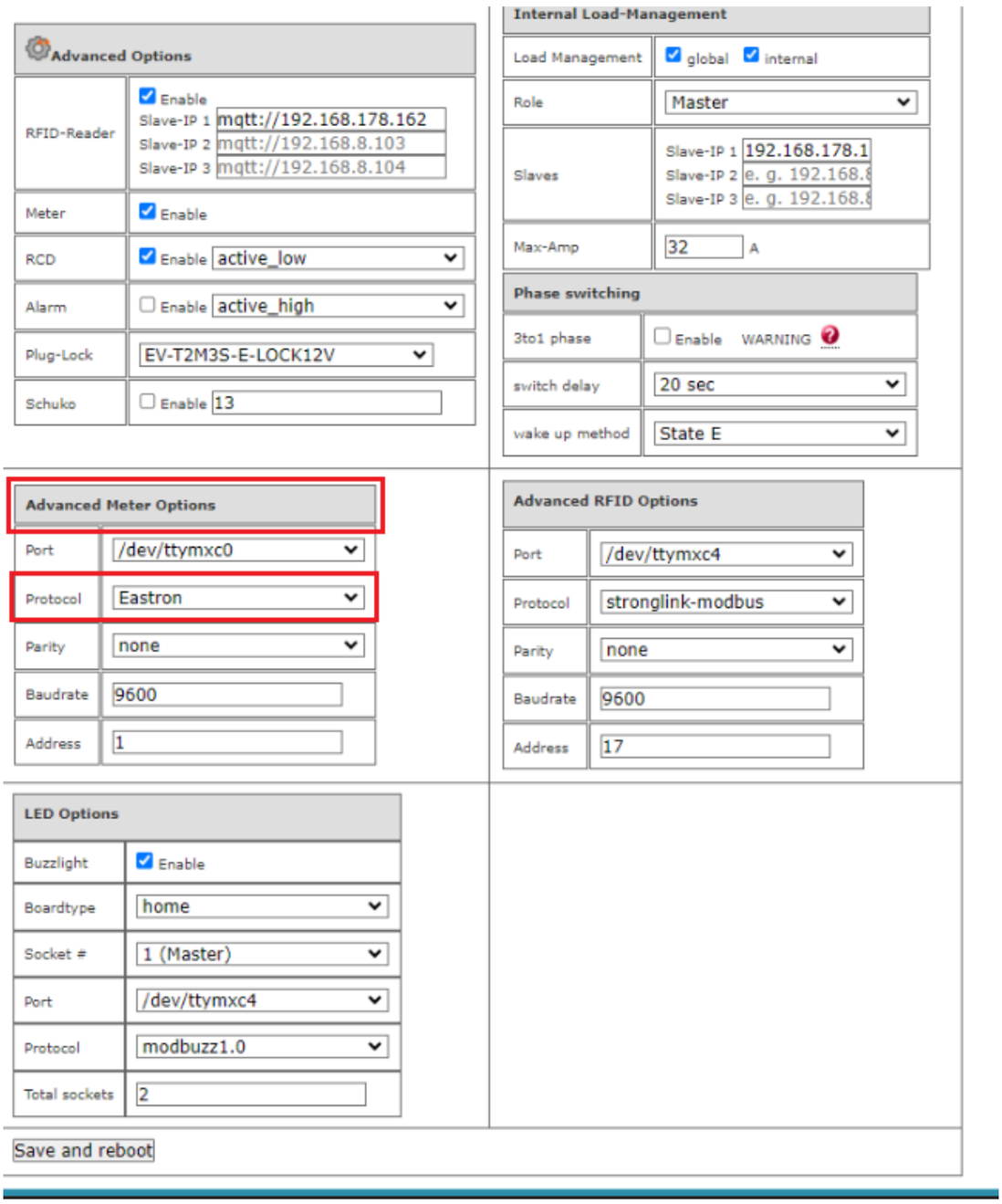


Figure 12. Meter installed (here: Eastron)

In this example, an "Eastron" meter is selected.

3.4. Saving the changes

To apply your changes, click on *Save and reboot*

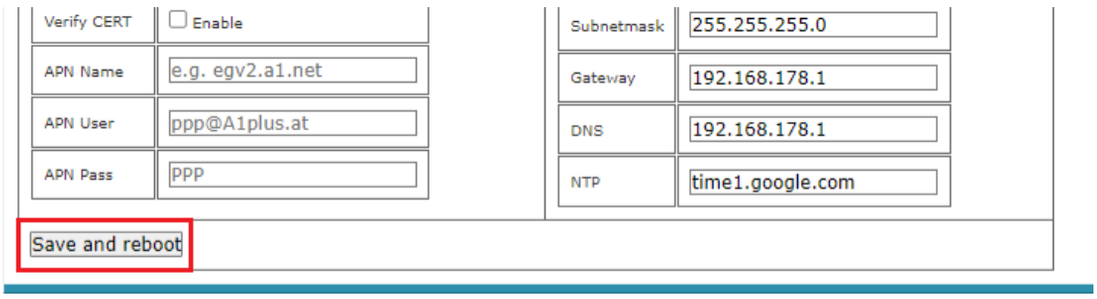


Figure 13. Save and reboot

We recommend that you always use the latest firmware to ensure that all the latest functions of the charging station can be used.

3.5. RFID-Autorisierung

Wir arbeiten aktuell an der Kompatibilität mit der Hardy Barth RFID-Autorisierung.

Bitte beachten Sie die nachstehenden Software Voraussetzungen zur RFID-Autorisierung Ihrer Hardy Barth eCharger cPµ2 Pro.

Kompatibilität mit FENECON-Energiemanagementsystem	
Hardy Barth eCharger	Erfordert Software-Version *2.2.0* oder neuer.

Um die RFID-Autorisierung testweise zu aktivieren, bitten wir Sie die nachstehenden Schritte zu befolgen.

1. Öffnen Sie hierzu die SALIA Web-Oberfläche.

Figure 14. SALIA Web-Oberfläche

2. Gehen Sie auf den Reiter *Configuration*.

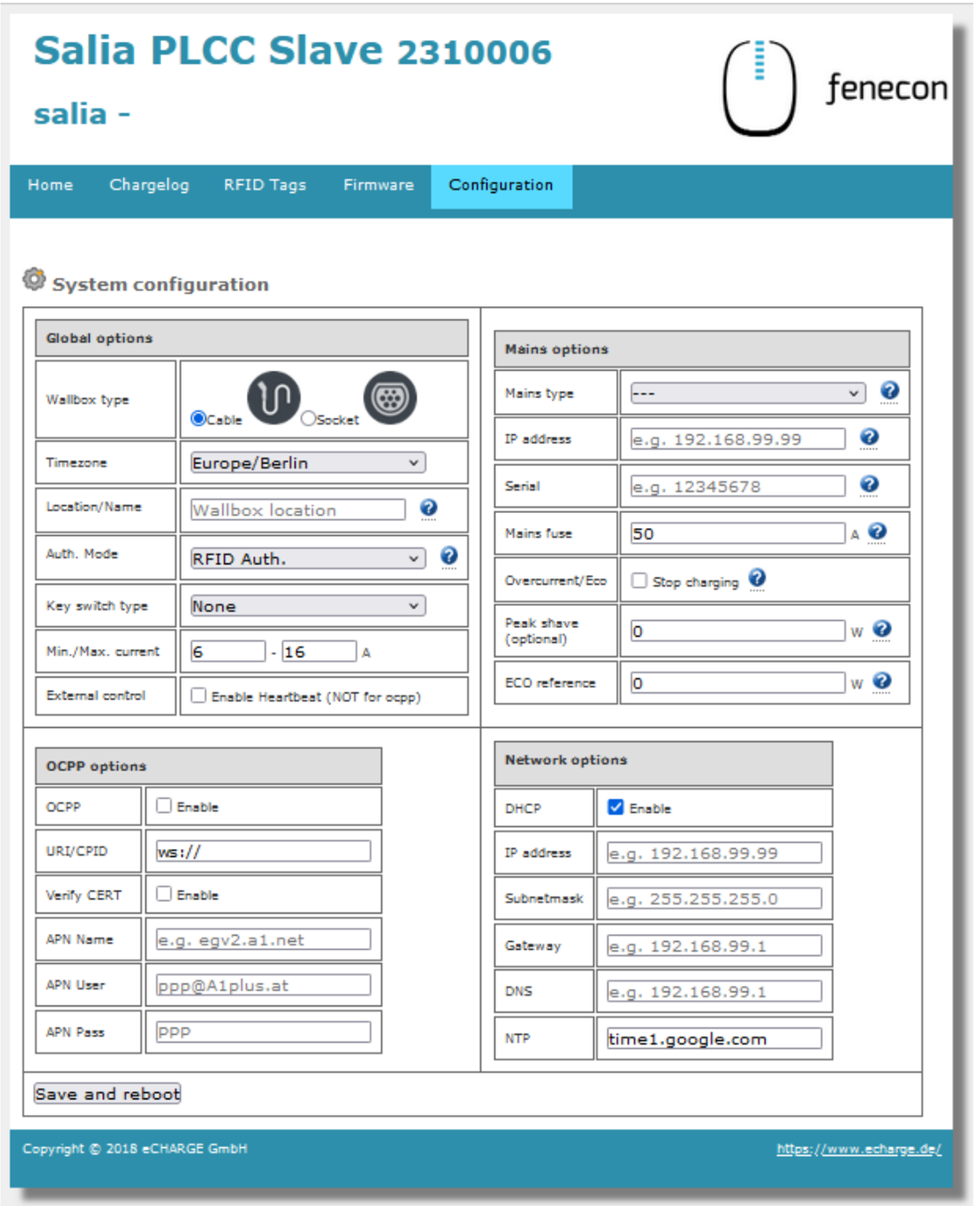


Figure 15. Network settings

3. Setzen Sie bei dem Abschnitt *Global Options* den Authorization Mode von Free Charging auf RFID Authorization.

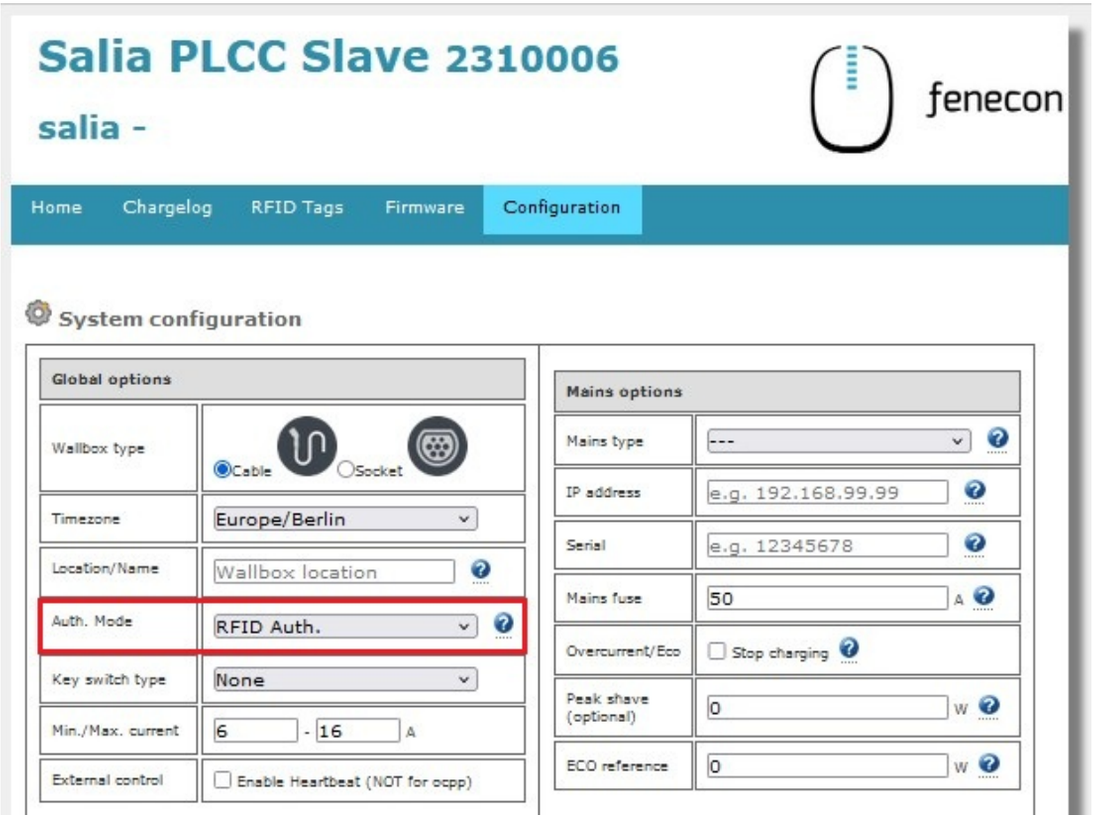


Figure 16. Autorisierung ändern

4. Um die Konfiguration abzuschließen klicken Sie bitte auf Save and Reboot.

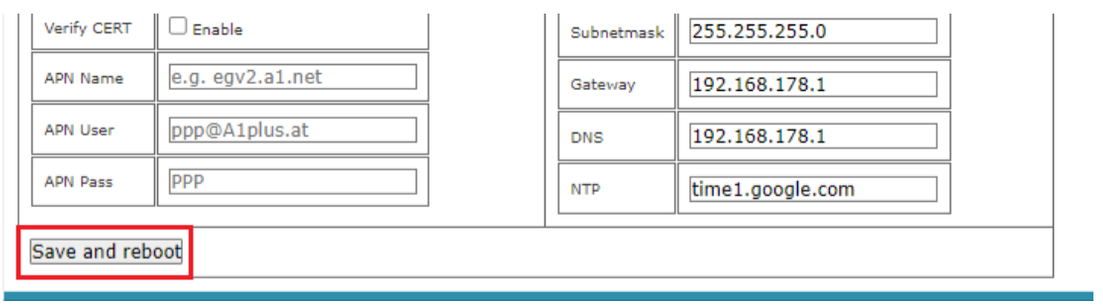


Figure 17. Save and reboot

5. Auf der Startseite Ihrer SALIA Web-Oberfläche sollte nun das Symbol für RFID-Autorisierung eingeblendet werden.

Bitte beachten Sie, dass die RFID-Autorisierung Ihres Hardy Barth eCharger cPµ2 Pro nur über die SALIA Weboberfläche ändern können.

Um die RFID-Autorisierung Ihres Hardy Barth eCharger cPµ2 Pro zu deaktivieren führen Sie die Schritte 1 bis 5 aus.

Wichtig, setzen Sie bei Schritt 3. *Global Options* den den Authorization Mode von RFID Authorization auf Free Charging.

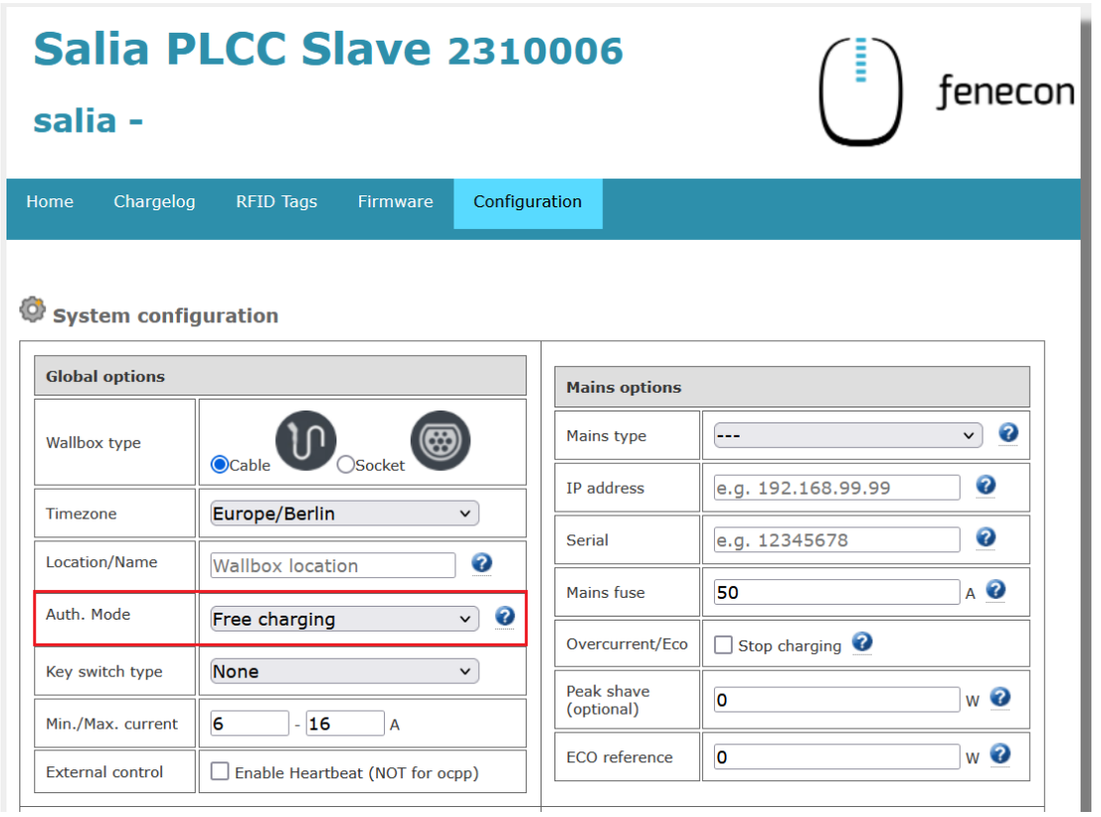


Figure 18. Autorisierung ändern

Auf der Startseite Ihrer SALIA Web-Oberfläche sollte nun das Symbol für RFID-Autorisierung ausgegraut sein.

Bitte beachten Sie, dass im Modus Free Charging keine Freigabe notwendig ist. Setzen Sie daher Ihren Hardy Barth eCharger cPµ2 Pro über die FEMS App AC-Ladestation auf AUS bei längeren Abwesenheiten.

3.6. Updating the charging station firmware

We recommend always using the latest firmware to ensure that all the latest functions of the charging station can

be used.

This can be obtained from the manufacturer's website of eCharge Hardy Barth or directly via the link below:
Salia eCharge Firmware

The firmware can then be updated via the web interface of the charging station (see Web interface — Charging station).

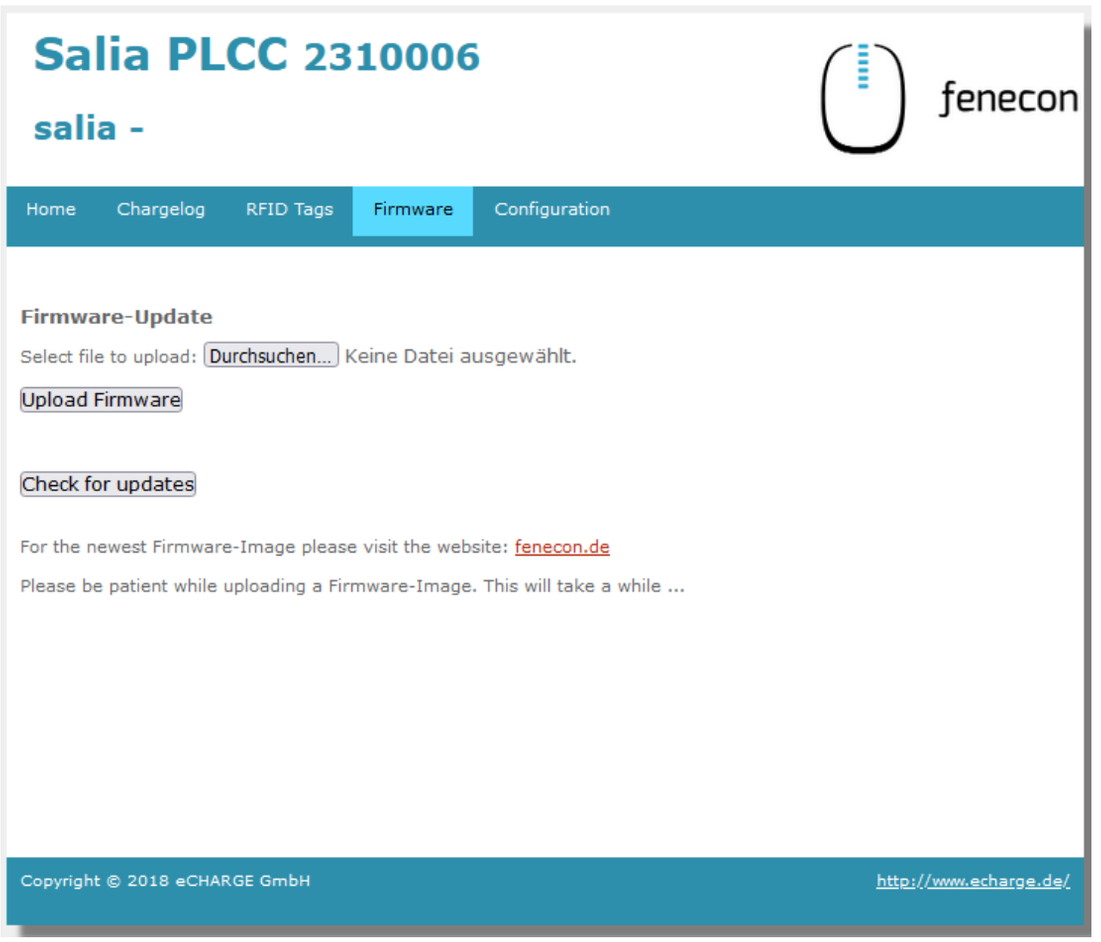


Figure 19. Web interface — Charging station

Then proceed as follows:

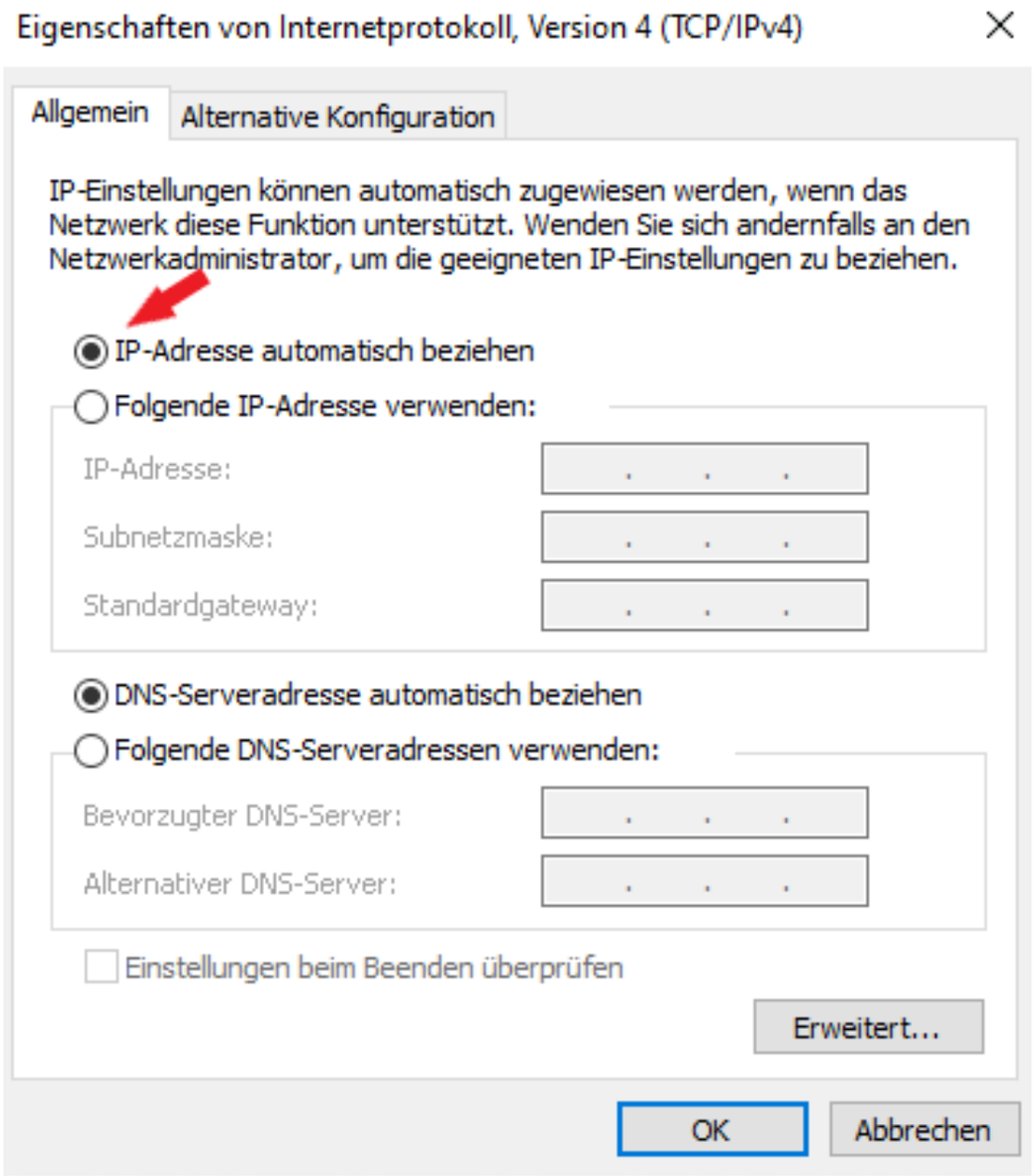
1. Reiter *Firmware* aufrufen.
2. Zuvor heruntergeladene Firmware Datei mit *Durchsuchen…* auswählen.
3. Auf *Upload Firmware* klicken.

The *Check for updates* function is only available from version 1.50.0 and up.

The software update has now been completed.

Denken Sie daran, die statische Vorgabe nach Abschluss der Konfiguration wieder zu entfernen. Anderenfalls ist das FEMS-Online-Monitoring nicht erreichbar und es können Verbindungsprobleme zum Internet auftreten.

Setzen Sie hierzu die Einstellung zurück auf "IP-Adresse automatisch beziehen", wie unten abgebildet:



Um sicherzustellen, dass alle aktuellen Funktionen auf Ihrem FEMS unterstützt werden, muss ein Update durchgeführt werden. Kontaktieren Sie hierzu unseren Service über die untenstehenden Kontaktdaten.

The configuration is now complete.

4. Install FEMS App eCharge Hardy Barth cPµ2 Pro Ladestation

Im FEMS App Center finden Sie alle installierbaren FEMS Apps — wie die FEMS App eCharge Hardy Barth cPµ2 Pro Ladestation.

In dem Benutzerhandbuch FEMS App Center finden Sie eine ausführliche Anleitung zur Bedienung des FEMS App Center. Des Weiteren wird beschrieben, wie ein Lizenzschlüssel registriert und eingelöst werden kann.

There are two ways to install an app via the FEMS App Center. Only the [Direct installation] is described below, whereby a license key is registered and redeemed in the FEMS.

4.1. Direct Installation

To install the FEMS App eCharge Hardy Barth cPµ2 Pro Ladestation directly, go to the overview of the {app-name-prefix} Center.

Only apps from the "Available" category can be installed.

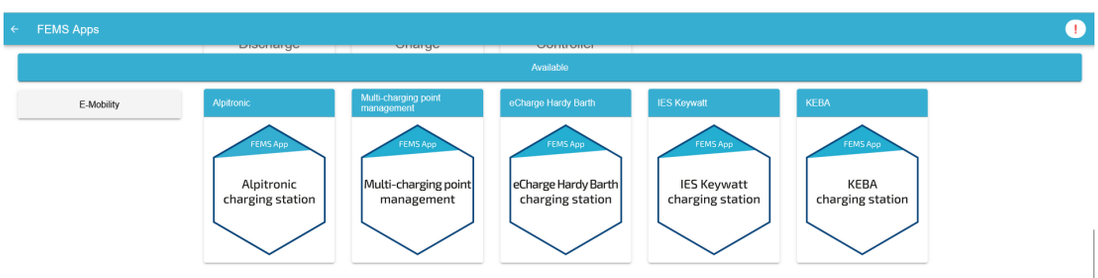


Figure 20. App installation — Variant 2: Step 1

Select the FEMS App eCharge Hardy Barth cPµ2 Pro Ladestation by clicking on it.

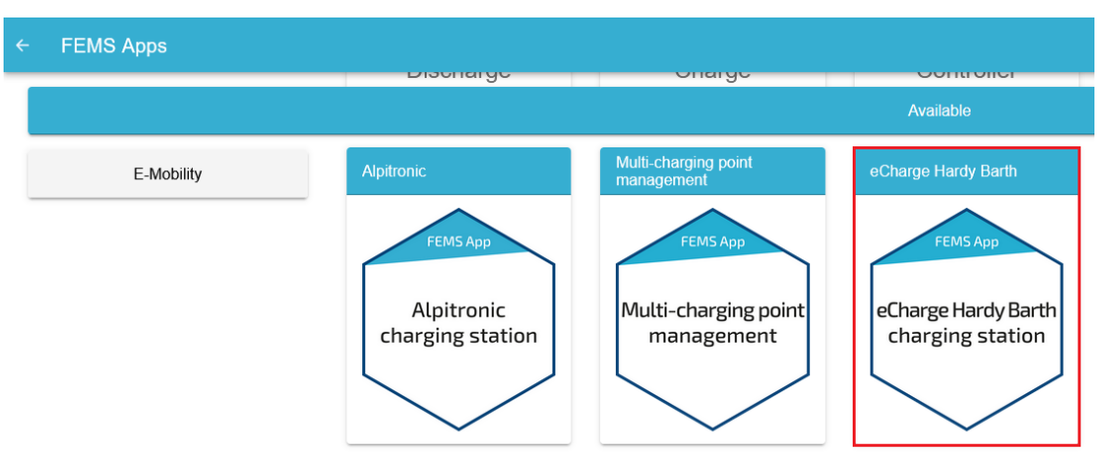


Figure 21. App installation — Variant 2: Step 2

You will then be taken to the app overview.

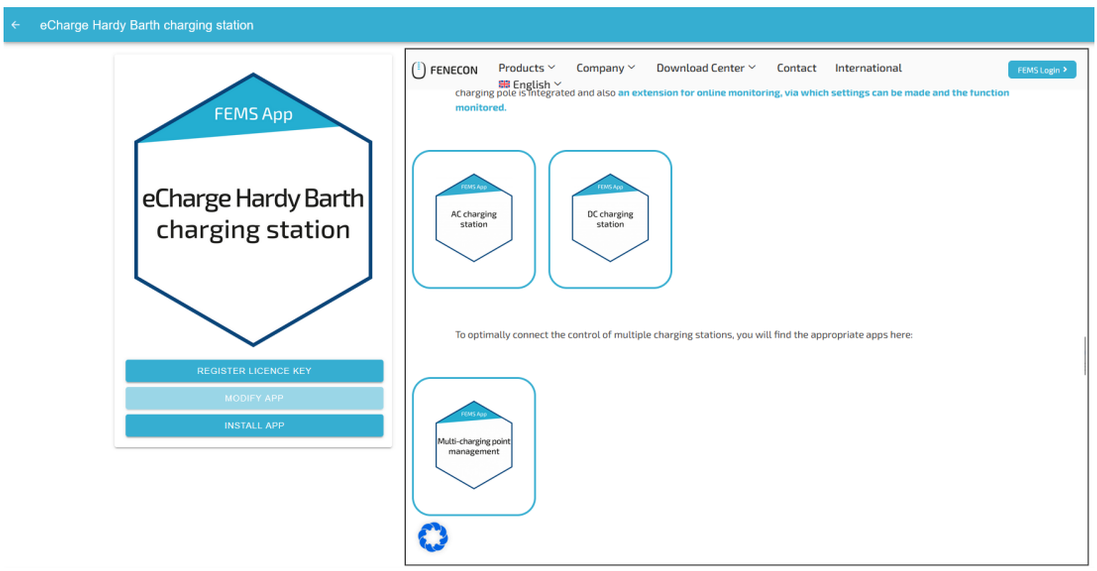


Figure 22. App installation — Variant 2: Step 3

Click on the "Install app" button.

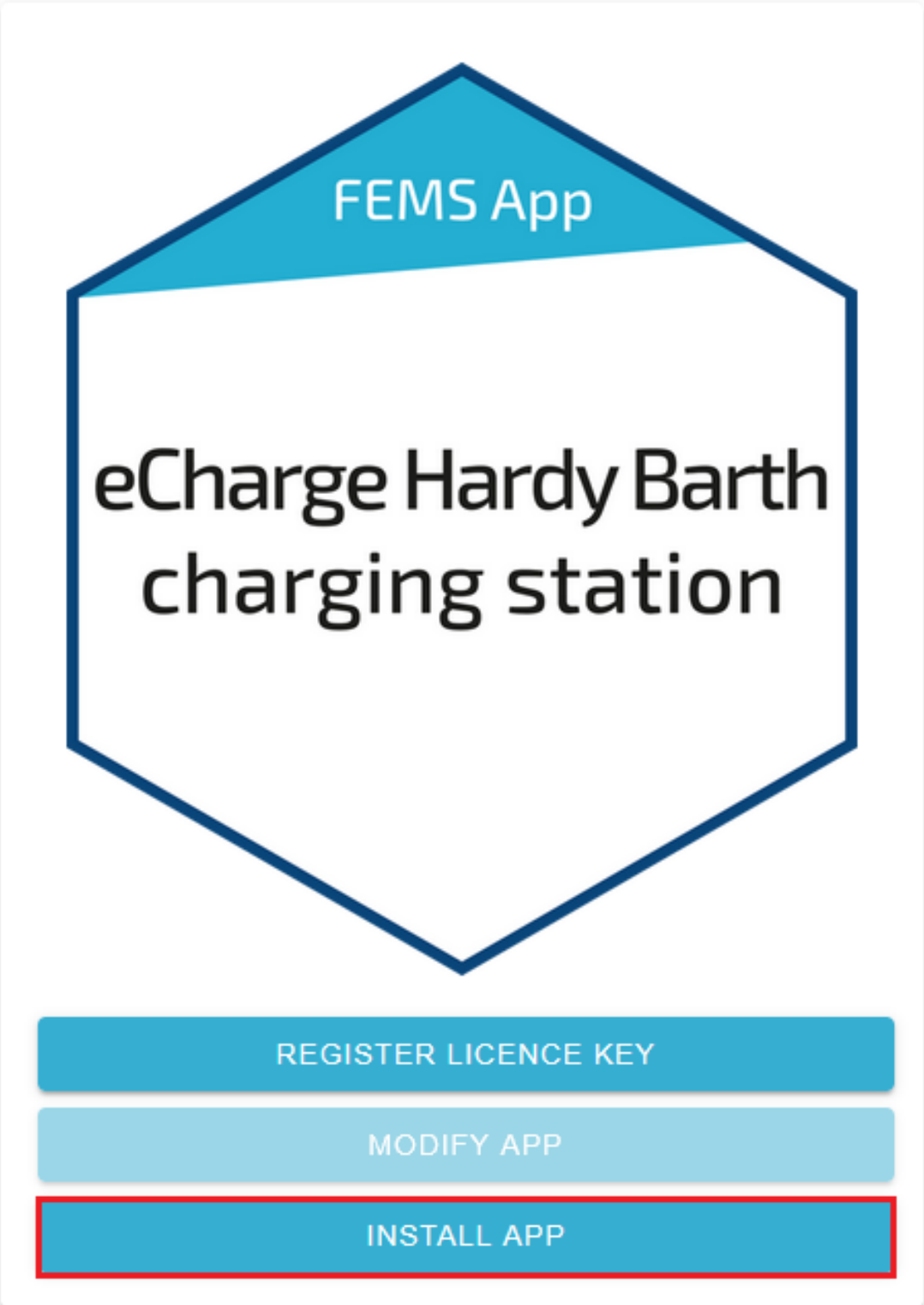


Figure 23. App installation — Variant 2: Step 4

An input mask for redeeming a license key appears.

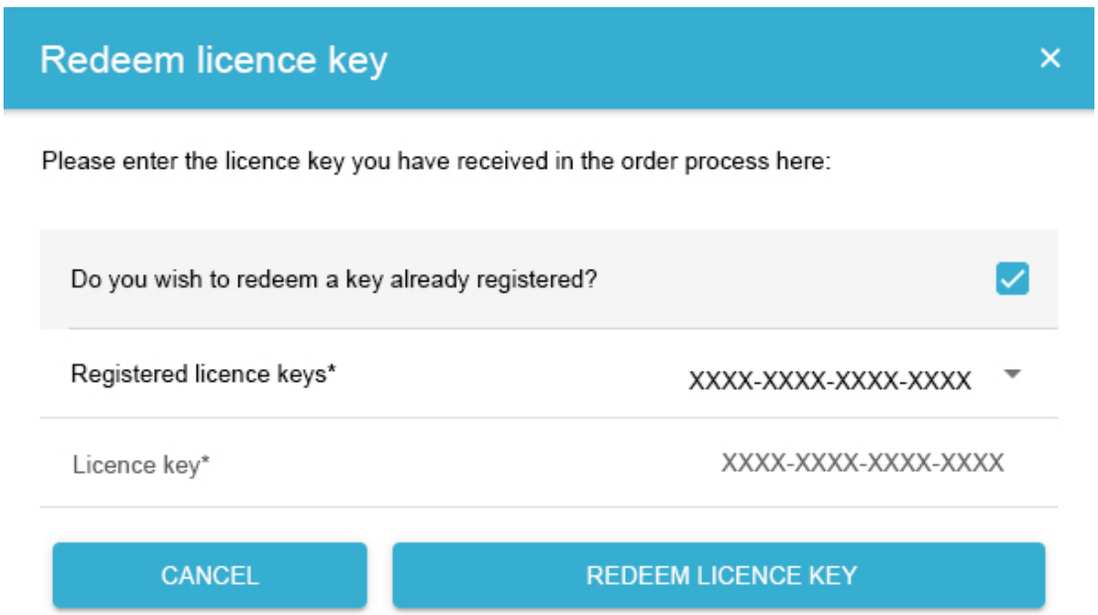


Figure 24. App installation — Variant 2: Step 5

You have two options here.

4.1.1. Redeem already registered license key

If you want to redeem an already registered license key, select it (1). Then click on the button of the same name to redeem the selected license key (2).

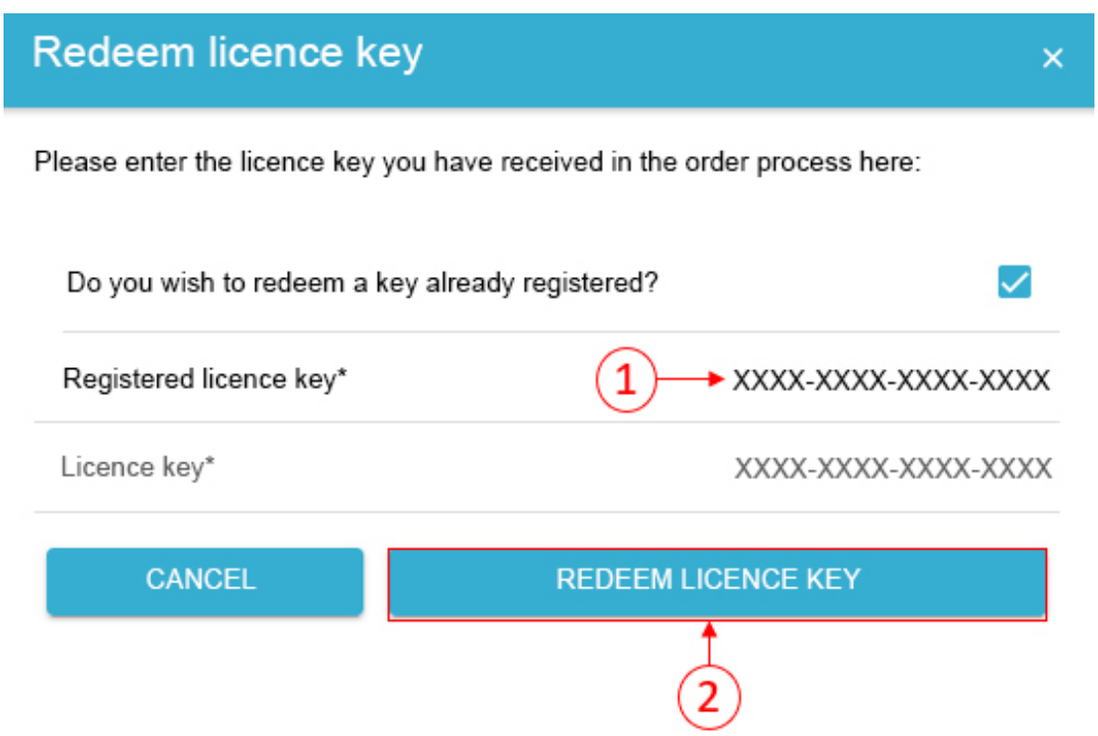


Figure 25. App installation — Variant 2: Step 5a

4.1.2. Redeeming a new license key

If you have not yet registered a license key or wish to redeem a new license key, enter the 16-digit key in the corresponding field (1) and then click on "Validate license key" (2). The entered license key is then checked for validity.

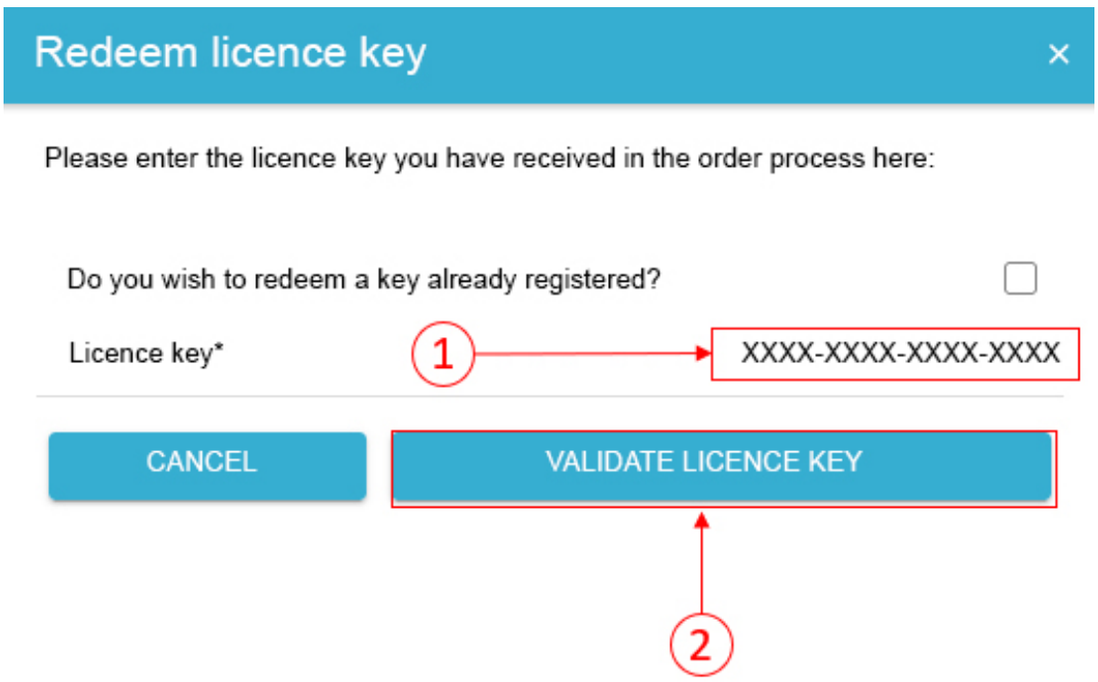


Figure 26. App installation — Variant 2: Step 5b

If the license key is valid, it can be redeemed by clicking on the button of the same name. If the license key is recognized as invalid, please check your entry and try again.

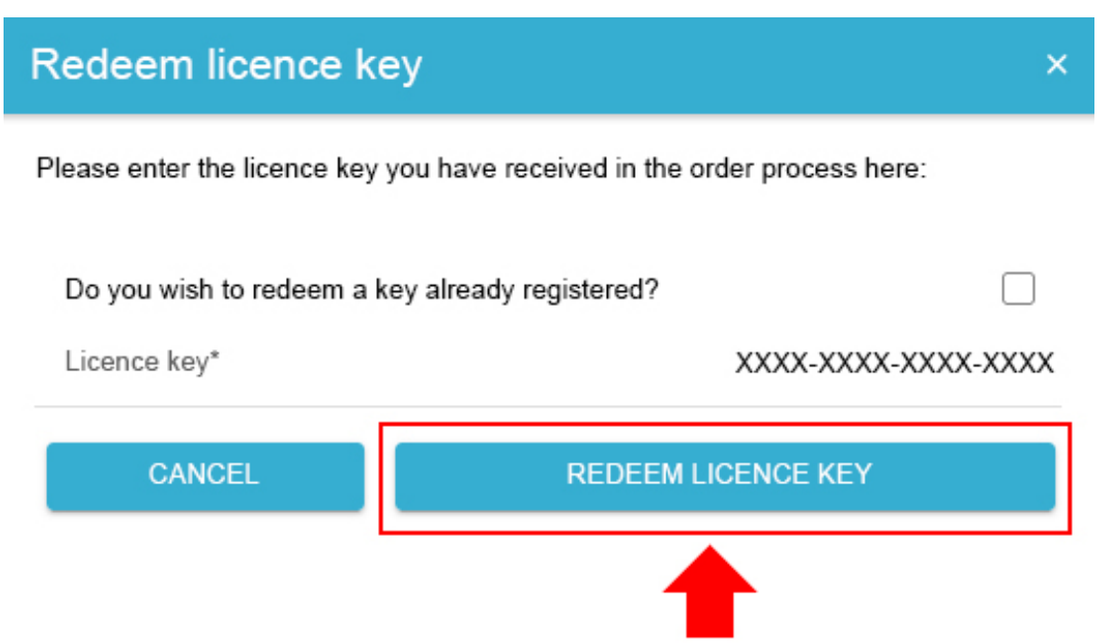


Figure 27. Redeeming a new license key: Step 6

You will then be taken to the installation wizard for FEMS App eCharge Hardy Barth cPµ2 Pro Ladestation.

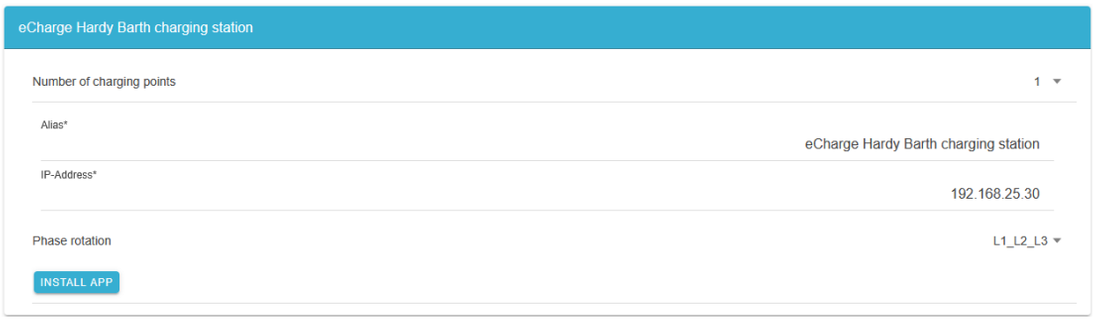


Figure 28. App installation — Variant 2: Step 7

Some of the input fields are pre-filled. Nevertheless, enter your data if it differs from the default values (e. g. IP address). Otherwise, the default values can be retained (e. g. port, Modbus unit ID).

Mandatory fields are marked with *

Check your entries and make sure that they are correct. Otherwise the respective app will not work properly!

For the Hardy Barth eCharger cPµ2 Pro, please select "1" for the number of charging points.

In einem nächsten Schritt können Sie eine Phasenrotation einstellen.

Bitte beachten Sie, dass die Phasenrotation erst ab dem FEMS Release 2024.11.2 oder neuer enthalten ist.

Als Standard ist der Phasenanschluss L1_L2_L3 ausgewählt.

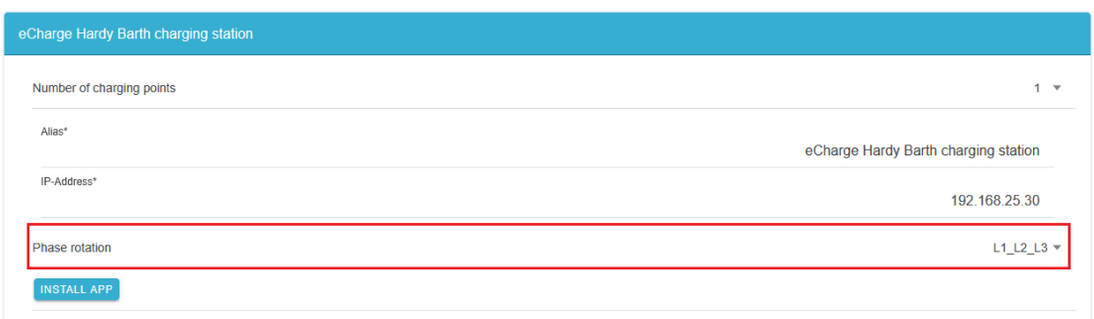


Figure 29. App-Installation — Phasenrotation: Schritt 1

Sollte Ihr Phasenanschluss hiervon abweichen, können Sie über den Drop-Down-Button einen anderen Phasenanschluss auswählen.

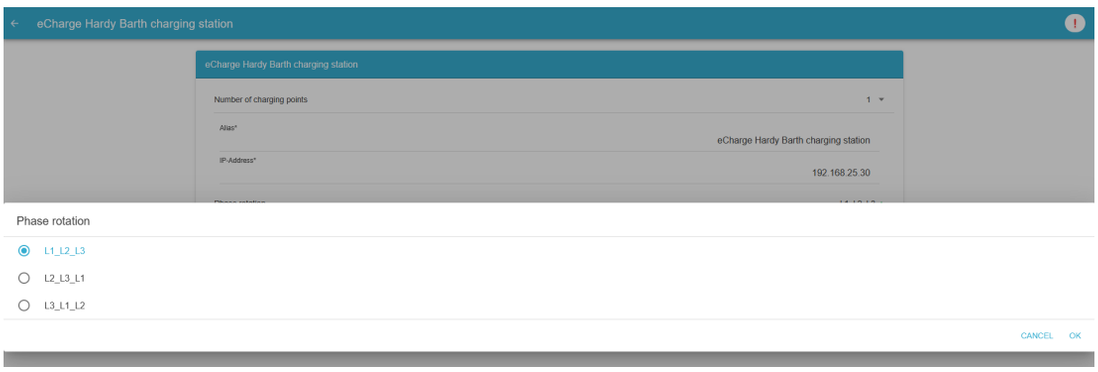


Figure 30. App-Installation — Phasenrotation: Schritt 2

Bestätigen Sie Ihre Auswahl mit "OK".

Then click on "Install app".

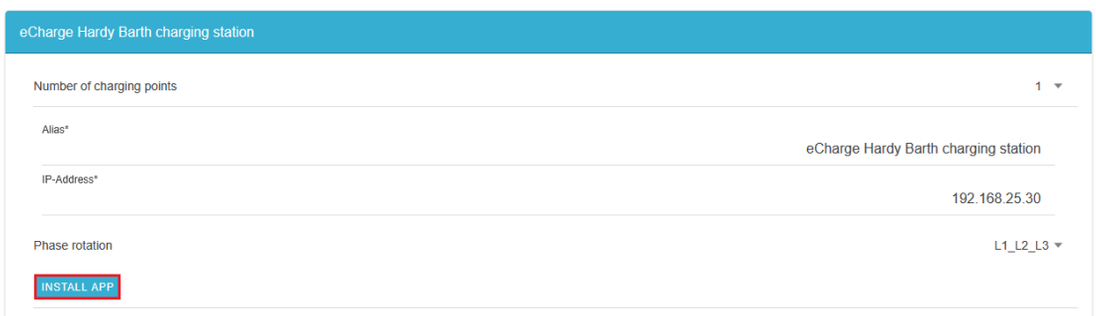


Figure 31. App installation — Variant 2: Step 8

Once the installation process is complete, the new app appears in the overview of the FEMS App Center in the "Installed" category.

4.2. Edit FEMS app

Bereits installierte Apps können nachträglich bearbeitet werden, um Konfigurationseinstellungen zu ändern. Wählen Sie hierzu die jeweilige App in der FEMS App Center Übersicht aus und klicken Sie auf die Schaltfläche "App bearbeiten". Eine detaillierte Anleitung hierzu finden Sie im Benutzerhandbuch FEMS App Center.

Die FEMS App eCharge Hardy Barth cPµ2 Pro Ladestation wurde erfolgreich installiert.

5. Contact

For support, please contact:

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6. Indexes

6.1. List of illustrations