

Installation and Configuration Manual — KEBA KeContact P40 / P40 Pro

Version:2026.10.1

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1. Introduction

1.1. Legal provisions

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

2. Product description

The FEMS App KEBA KeContact communicates with the FENECON Energy Management System via Modbus TCP/IP.

Please note that Modbus TCP/IP requires software version *1.2.0* or *later*.
This functionality has been tested and approved up to firmware version **1.3.0**.

At the following KEBA Downloads & Updates eMobility website, you'll find all software updates for the KEBA KeContact P40 / P40 Pro.

3. Commissioning



To install the KEBA charging station, please follow the instructions in the "KeContact P40 / P40 Pro Charging Station Installation Manual."
Installation Manual — KEBA KeContact P40 / P40 Pro

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.

Install the KEBA KeContact P40 / P40 Pro charging station according to the KEBA GmbH installation instructions.

Please note that the site conditions of KEBA GmbH apply.

Follow the instructions for the power supply for the KEBA KeContact P40 / P40 Pro charging station.

3.1. Ethernet connection

The KEBA KeContact P40 / P40 Pro series connects to the FENECON Energy Management System via the customer's network using the LAN network interface (RJ45). Please follow the steps below.

Connect the RJ45 plug to the LAN network connection X3 provided on the KEBA KeContact P40.

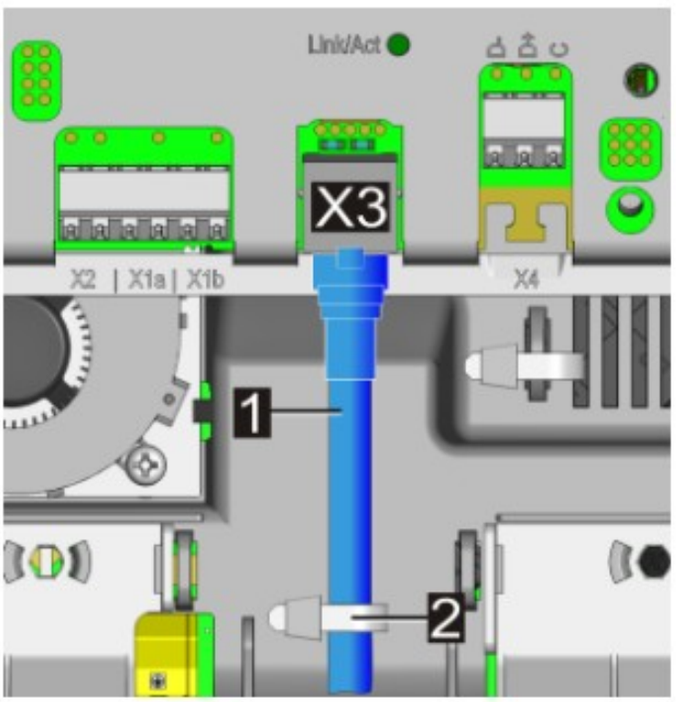


Image 1. Connection overview KEBA KeContact P40

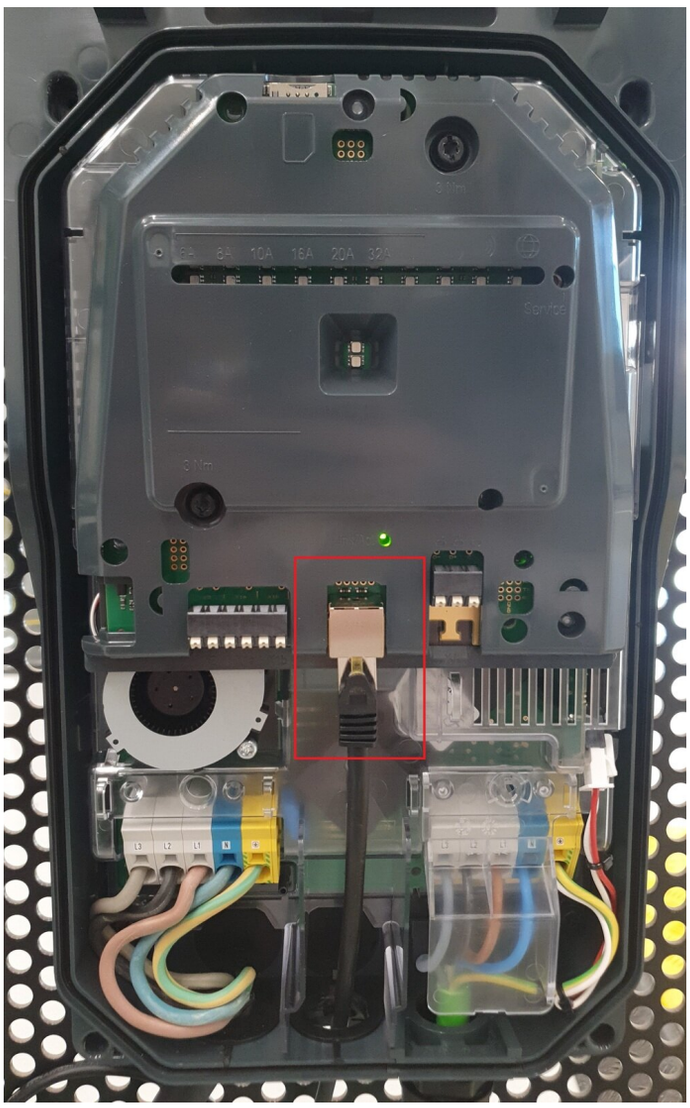


Image 2. Example of a network connection

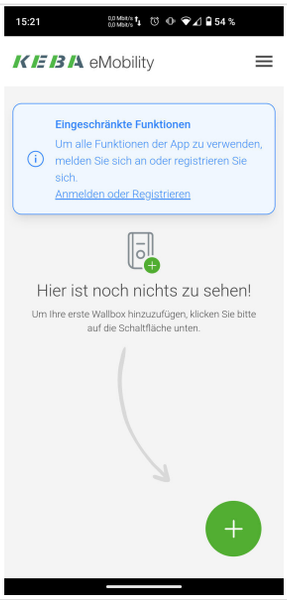
In a network, IP addresses are typically assigned automatically via DHCP. In many cases, this is handled by the internet router, e. g. a router such as a FRITZ!Box. This can result in a loss of communication between EMS and the charging station. To prevent this, a static IP address can be assigned.

3.2. Assigning an IP address via DHCP

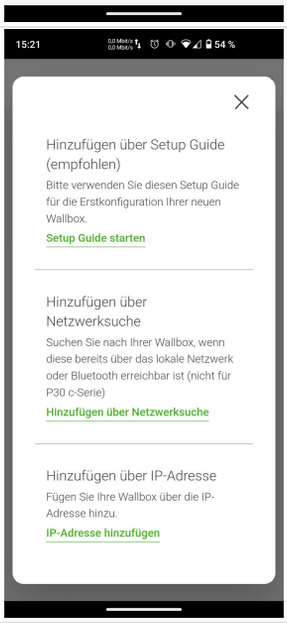
Once connected to the customer’s network, the KEBA KeContact P40 / P40 Pro is assigned an IP address via DHCP. This IP address can be found in the DHCP server, e. g. the router. Alternatively, the IP address of your KEBA KeContact P40 / P40 Pro can be retrieved via the *KEBA eMobility App*.

4. Configuration

The KEBA KeContact P40 / P40 Pro series can only be set up via the *KEBA eMobility App*. Please download the *KEBA eMobility App* from the AppStore or Google PlayStore.



1. Open the *KEBA eMobility App*.
2. Click the green "+" button to set up a new KEBA KeContact P40 / P40 Pro.

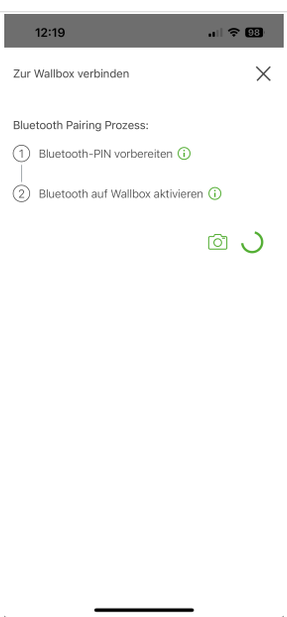


3. There are three ways to establish a connection to the new KEBA KeContact P40 / P40 Pro using the *KEBA eMobility App*. The following section describes the setup process via *Add via Setup Guide*.

	4. Select the desired KEBA KeContact series — here: KEBA KeContact P40 / P40 Pro.

Table 1. Home page of the KEBA eMobility App

Please make sure that Bluetooth activated on your cell phone.
Stay close by throughout the entire pairing process.

	5. The Bluetooth pairing process will then start automatically.

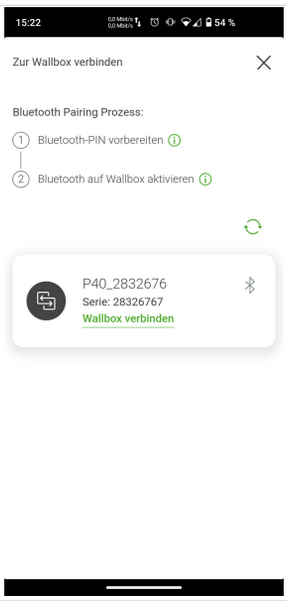
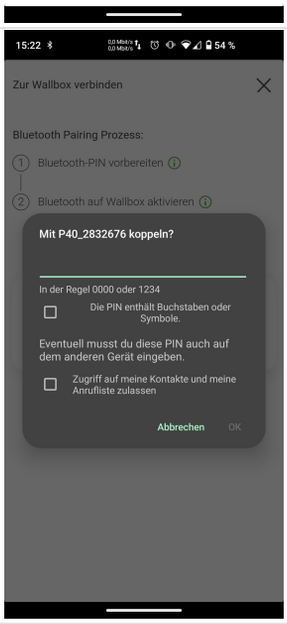
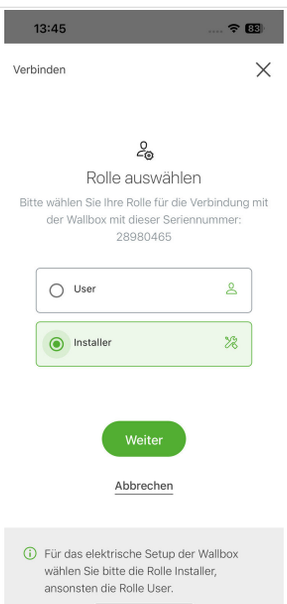
	6. You may see several KEBA KeContact P40 / P40 Pro devices listed in your vicinity. Identify your KEBA KeContact P40 / P40 Pro using the serial number. Click on *Connect Wallbox*.
	7. Confirm "Pair with P40_serial number?". 8. Enter the PIN (see back of KEBA KeContact P40 instructions).

Table 2. Example of a network connection

	9. Under "Select role", choose "Installer". 10. Click on "Next".

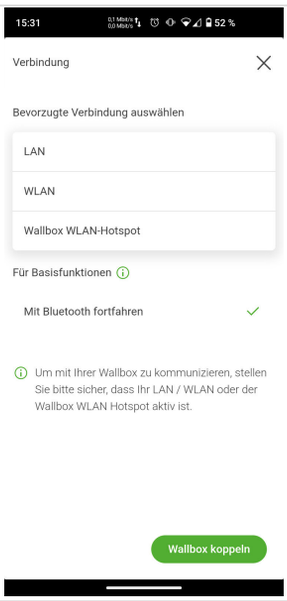
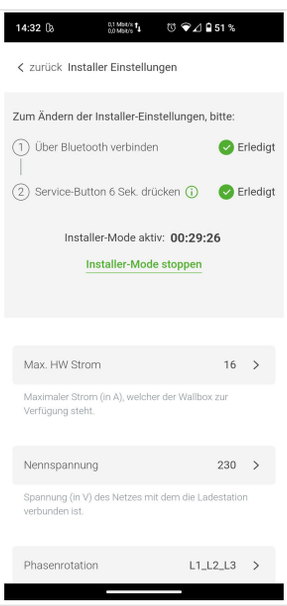
	11. You will then be prompted to enter the serial number and the installer PIN (see the back of the KEBA KeContact P40 manual).
	12. Select your preferred connection. We recommend connecting via "LAN". 13. Click on "Pair wallbox". This setting applies only to the "User" access level. Installers do not select a preferred connection.

Table 3. Setup for Installer Accounts

	14. Once the connection is established, the KEBA KeContact P40 / P40 Pro must be restarted. To do this, press and hold the service button for 6 seconds.

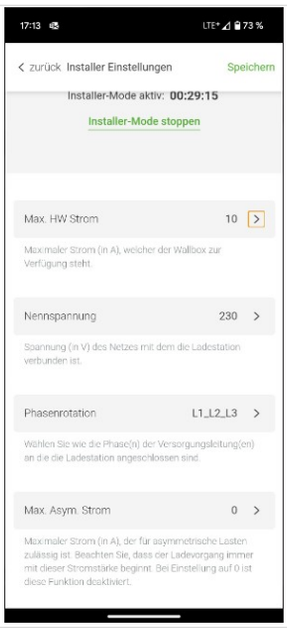
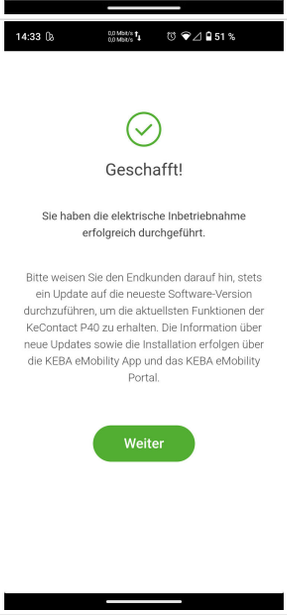
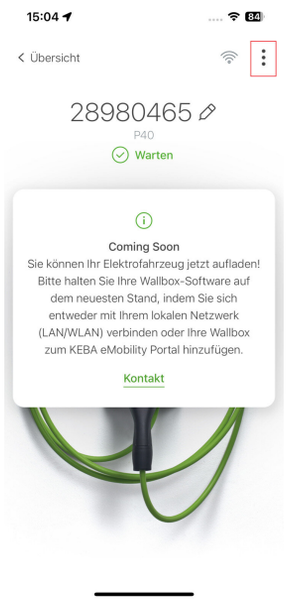
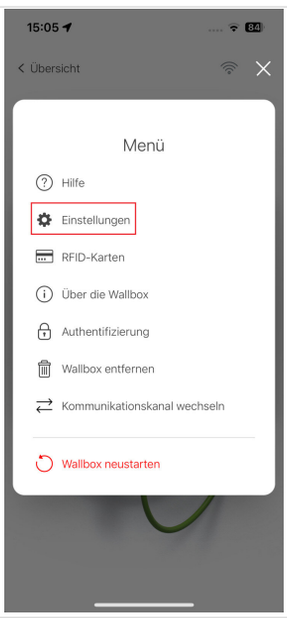
	15. Then, enter the following … ◦ for *Max. HW current*, indicate the maximum current in Ampere. ◦ for *Nominal voltage*, enter the voltage of the grid to which the charging station is connected. ◦ for *phase rotation*, indicate the sequence of the phases (or supply lines). ◦ Under *Max. Asym. Current*, specify the maximum current in A for asymmetric charging.
	16. Then click on "Save" in the top right-hand corner.
	17. You’ve done it! You have successfully completed the electrical commissioning.

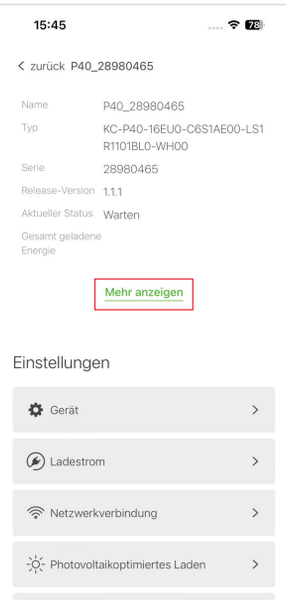
Table 4. Configuration of the KEBA KeContact P40 / P40 Pro



18. On the overview page, click the ⋮ button.



19. Select the "Settings" tab.



20. On the settings page, click the "Show more" button.

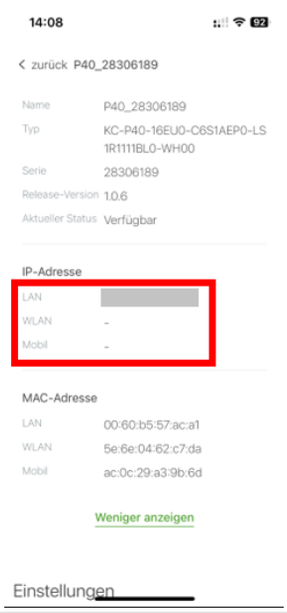
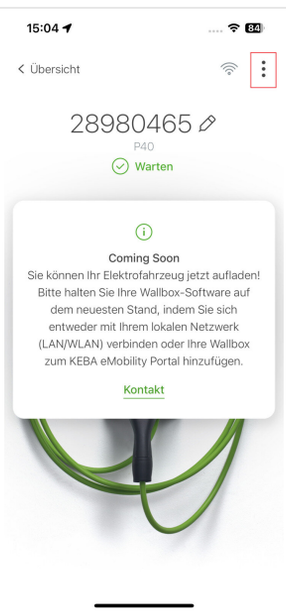
	21. The IP address (here: LAN) is then displayed.

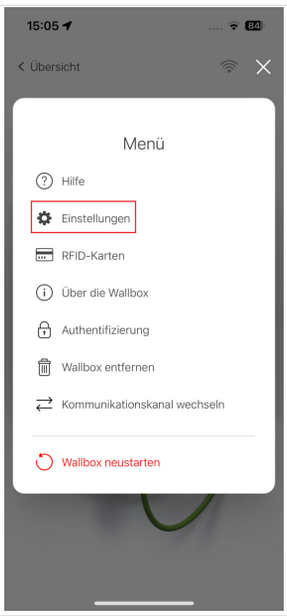
Table 5. Read out IP address via the *KEBA eMobility App*

Please make a note of the assigned IP address. The IP address is required below to set up the FEMS App KEBA KeContact.

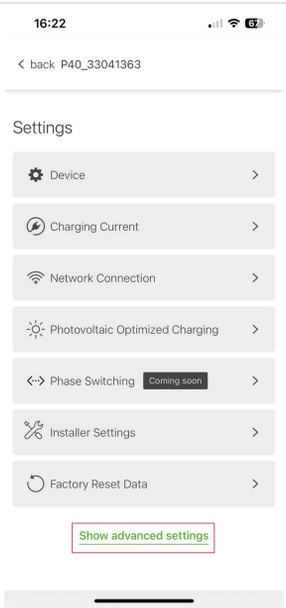
The FEMS App KEBA KeContact communicates with the FENECON Energy Management System via Modbus TCP/IP.

The FEMS App KEBA KeContact uses a Modbus TCP/IP interface.
For the KEBA KeContact P40 / P40 Pro charging station, the Modbus TCP register must be enabled in the advanced settings of your *KEBA eMobility App*.

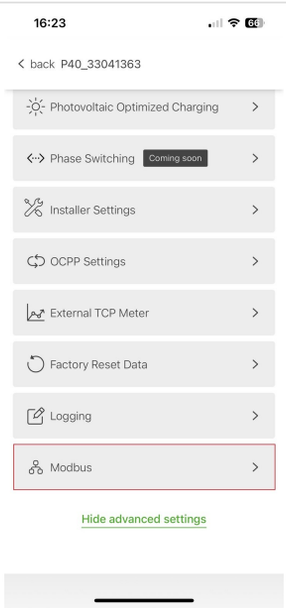
	22. On the overview page, click the icon:ellipsis-v button [role=black, set=fas].



23. Select the "Settings" tab.



24. Scroll to the bottom of the settings page. Click the "Show Advanced Settings" button.



25. Select the "Modbus" tab.

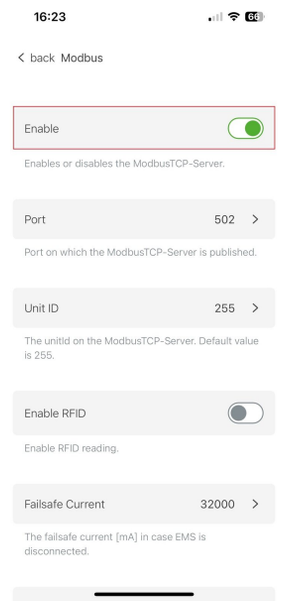
	26. Set the slider to "ON" to "Enable" Modbus TCP on your KEBA KeContact P40 / P40 Pro.

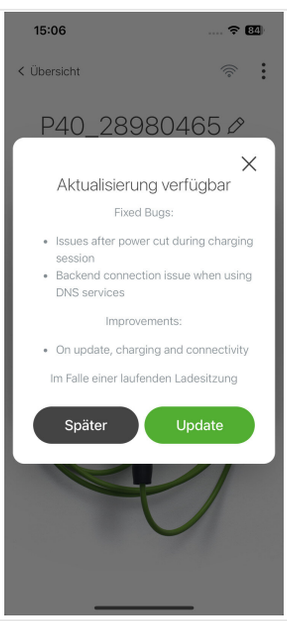
Table 6. Enabling Modbus TCP

4.1. Updating the charging station firmware

The latest software updates are automatically displayed when you open the *KEBA eMobility App*.



This feature has been tested and approved up to firmware version **1.3.0**.

	1. Click on "Update" in the *Update available* pop-up.

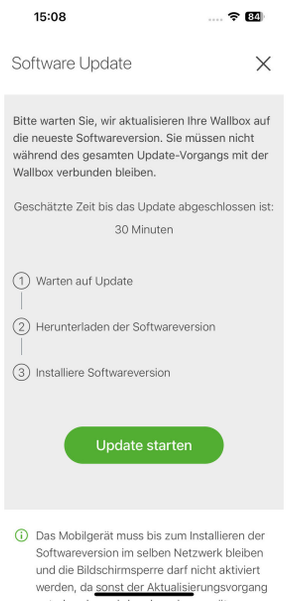
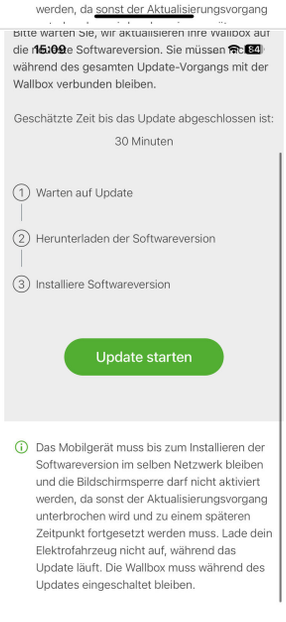
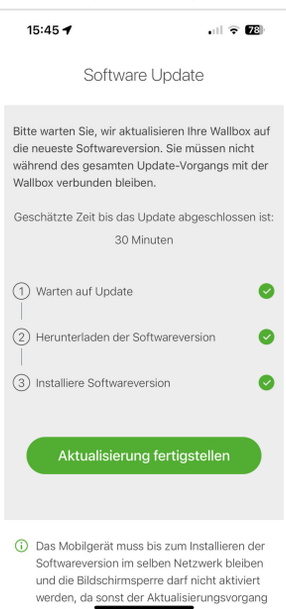
	2. Your KEBA KeContact P40 / P40 Pro starts the software update.
	3. Please follow the instructions.
	4. After successful installation, click on "Finish update." 5. Your KEBA KeContact P40 / P40 Pro will then be restarted.

Table 7. Software update of the KEBA KeContact P40 / P40 Pro

The configuration is now complete.

5. Install FEMS App KEBA KeContact

In the FEMS App Center you will find all installable FEMS Apps — such as the FEMS App KEBA KeContact.

The user manual FEMS App Center provides detailed instructions on how to use the FEMS App Center. It also explains how to register and redeem a license key.

Then follow the instructions in the FEMS App installation wizard on your KEBA KeContact P40 / P40 Pro.

5.1. Installation wizard

You will then be taken to the installation wizard for FEMS App KEBA KeContact.

Please select the correct series for your KEBA KeContact under Product series.

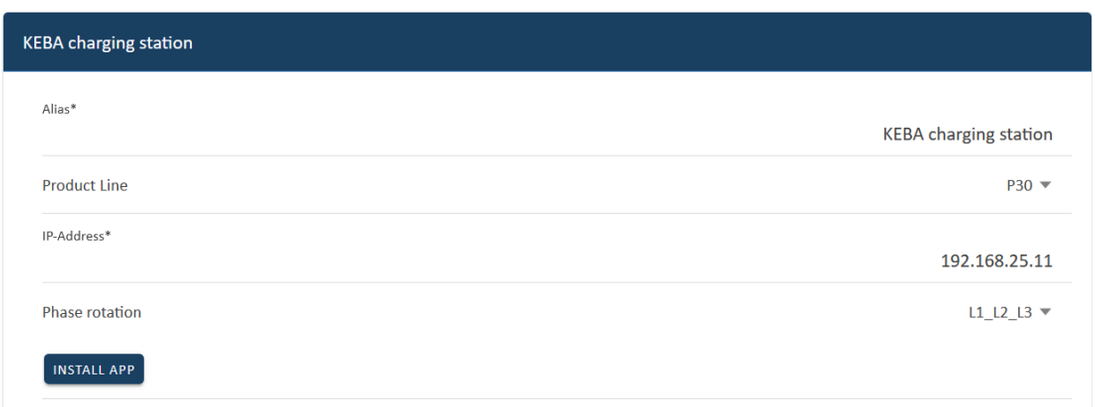


Image 3. App installation — Variant 2: Step 7

Please select "P40" under *product range* if you have a KEBA KeContact P40 / P40 Pro.

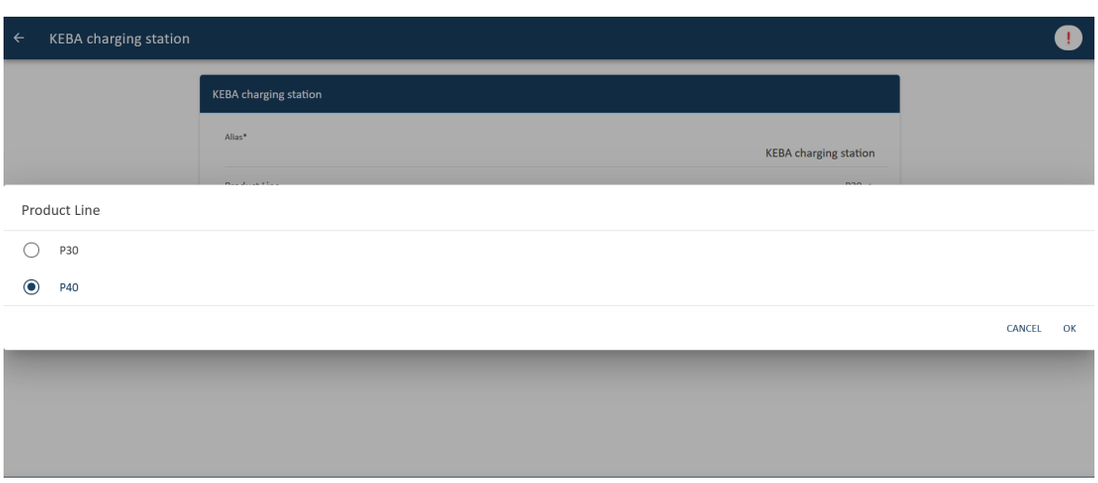


Image 4. App installation — Selecting the KEBA KeContact P40

Confirm your selection by clicking the "OK" button.

The installation wizard for the KEBA KeContact P40 / P40 Pro will then be displayed.

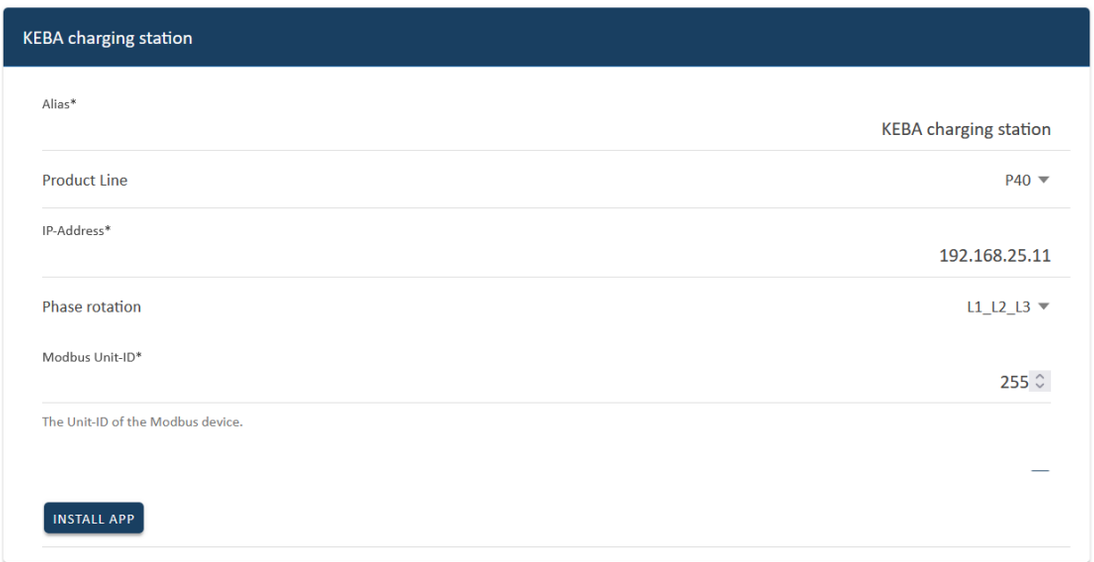


Image 5. App installation — Variant 2: Step 7

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!

In the next step, you can set a phase rotation.

Please note that phase rotation is only included from FEMS release 2024.11.2 or later.

The phase connection L1_L2_L3 is selected as standard.



Image 6. App installation — Phase rotation: Step 1

If your phase connection differs from this, you can select a different phase connection using the drop-down button.

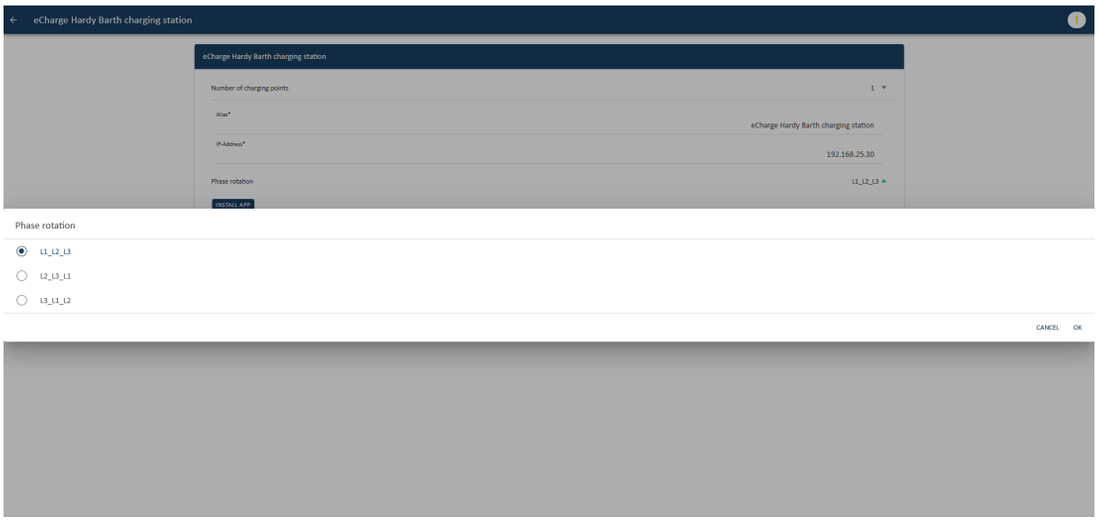


Image 7. App installation — Phase rotation 2: Step 2

Confirm with "OK".

Then click on "Install app".

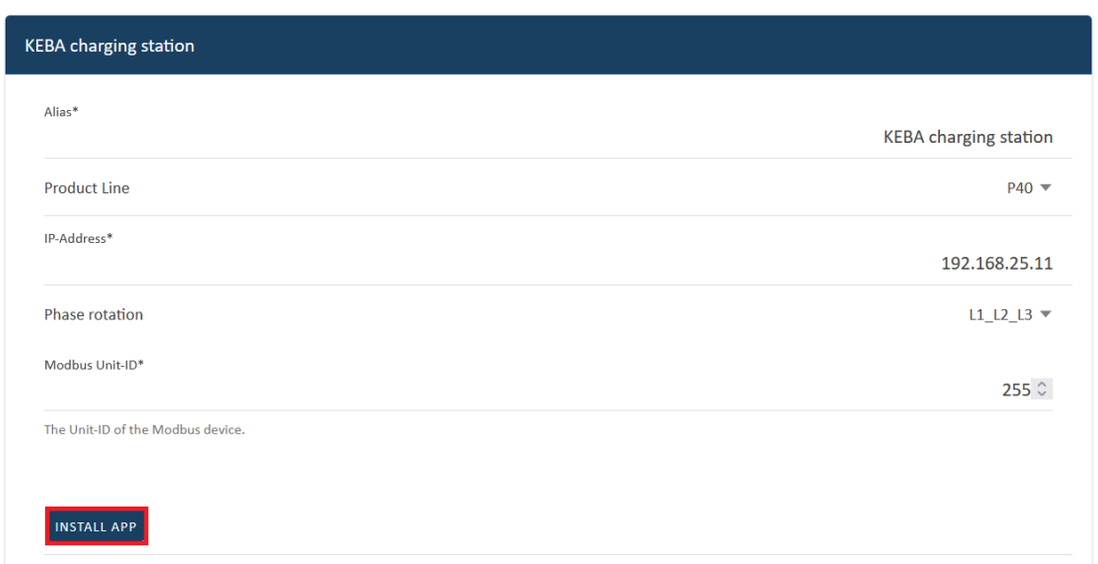


Image 8. App installation — Variant 2: Step 8

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

The FEMS App KEBA KeContact has been successfully installed.

6. Phasenumschaltung bei der KEBA KeContact P40 / P40 Pro

Für die (automatische) Phasenumschaltung muss eine aktuelle EMS Version (2026.10.1 aufwärts) installiert sein. Die neuen Funktionen werden weiter unten in dieser Anleitung erläutert.

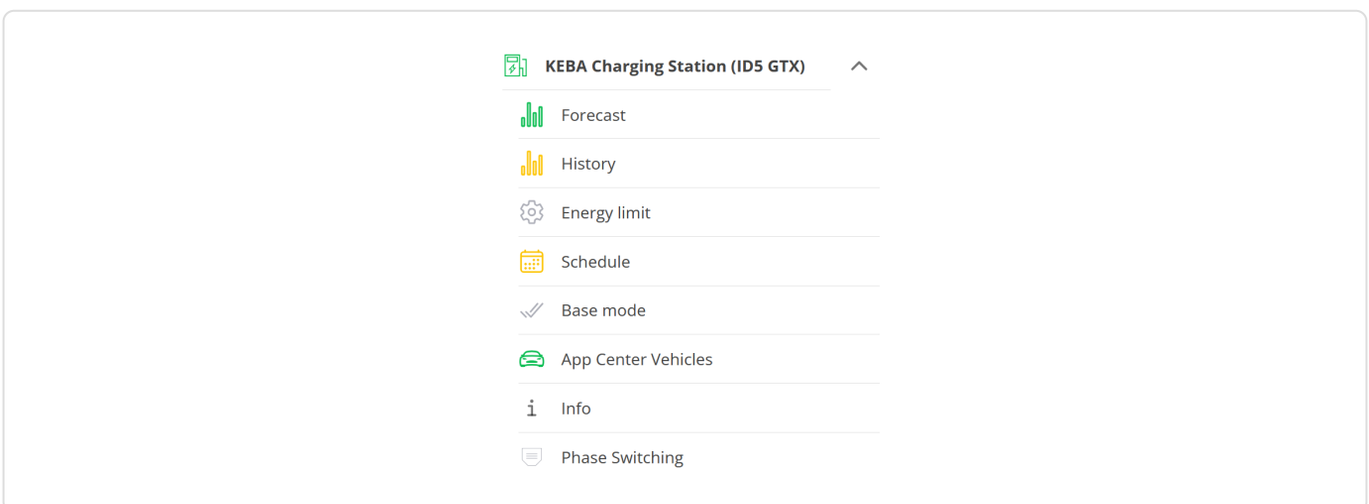
Die (automatische) Phasenumschaltung ist **nicht** für die eichrechtskonforme KEBA KeContact P40 Dienstwagen-Wallbox verfügbar.

7. How to Use Installation and Configuration Manual — KEBA KeContact P40 / P40 Pro

7.1. Charging stating main window

A charging station is displayed in EMS at Consumption.

Click or tap in the menu to open the main window for your charging station. This window displays various pieces of information, e. g. the current charging mode, charging power, etc.



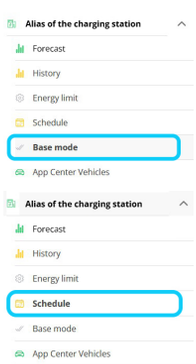
Depending on the submenu item selected, the main window displays different information and settings:



Base Mode	PV
Actual Mode	Off
State	Charging stopped by vehicle
Power	0 W
Energy since the last charge start	0 Wh

The highlighted area below displays custom tasks (schedule).

In addition, the modes currently active — **Base Mode** and **Active Mode** — are displayed to the right of the charging station.

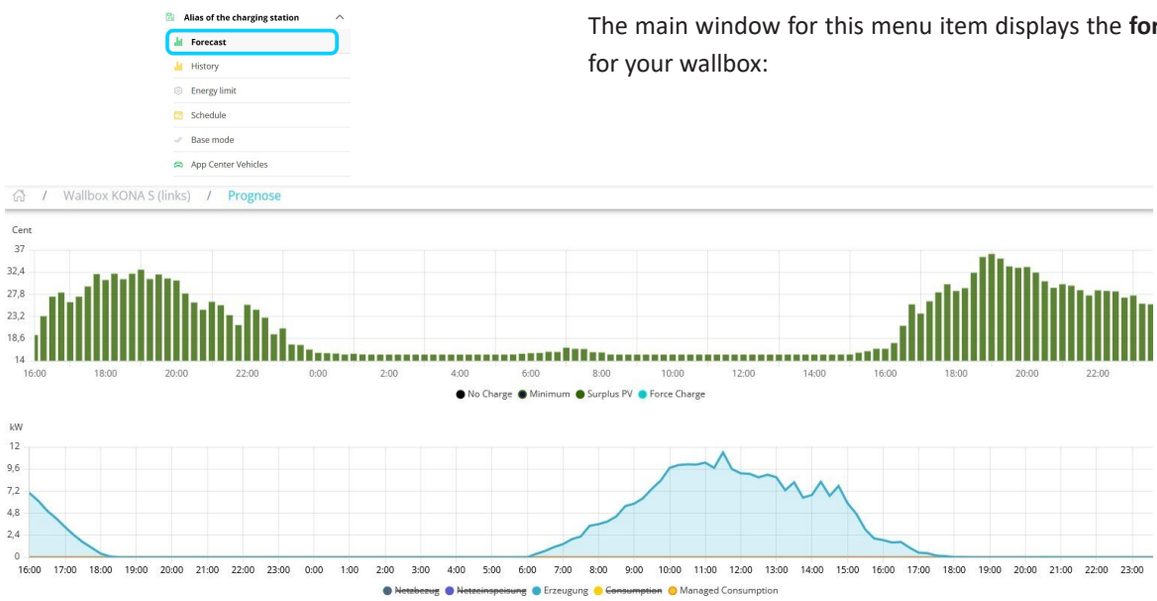


The **Base Mode** can be set via the submenu item {charging-station-base-mode-xref}.

Active Mode can be set via the submenu item {charging-station-task-scheduling-xref}.

Table 8. Explanation — Basic Mode and Active Mode

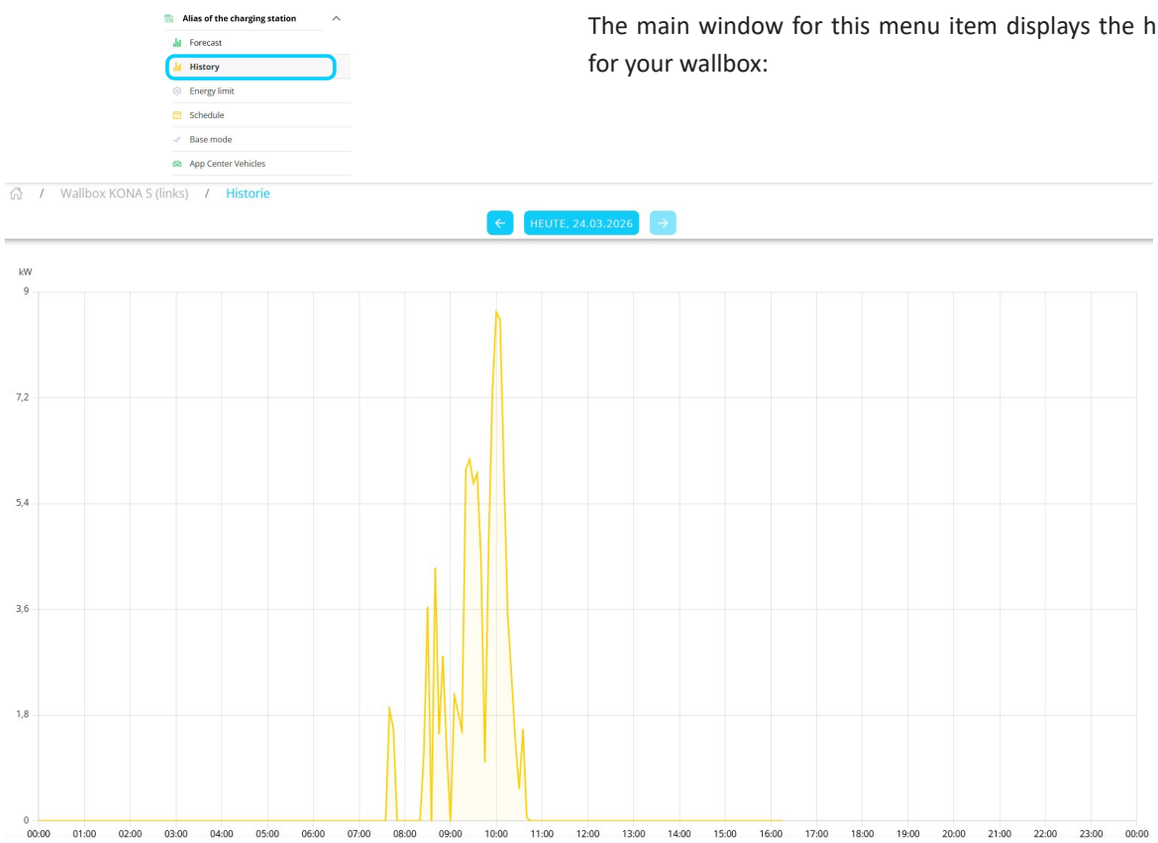
7.2. Forecast



The main window for this menu item displays the **forecast** for your wallbox:

Table 9. Explanation — Forecast

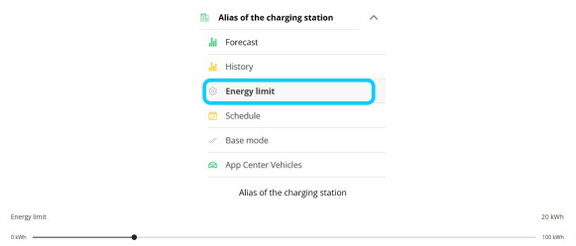
7.3. History



The main window for this menu item displays the history for your wallbox:

Table 10. Explanation — History

7.4. Energy limit



Use this menu item to set an **energy limit** for charging your vehicle.

There is a slider for this in the corresponding main window.

- Energy limit **0**: The vehicle will continue charging without restriction until its battery is fully charged or **Base Mode** is set to *Off*.
- Energy limit **20**: The battery is charged up to a maximum of 20 kWh during each charging cycle.

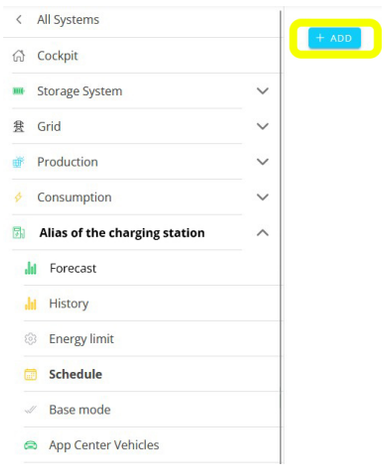
etc.

Confirm the setting using the ☑ in the lower-right corner of the main window.

Table 11. Explanation — Energy limit

7.5. Schedule (Active Mode)

Klicken oder tippen Sie auf die Menüoption *Zeitplan*, um einen **Aktiven Modus** einzustellen.
Dieser Modus überschreibt den Grundmodus der Ladestation mit benutzerdefinierten Aufgaben.

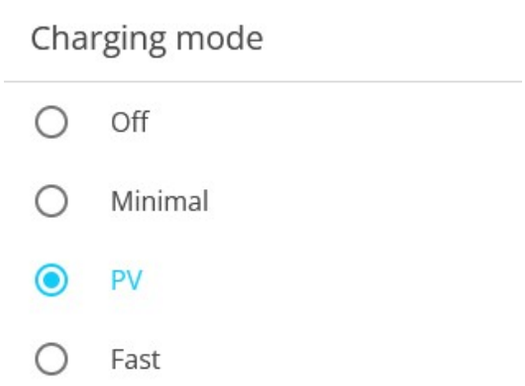


In the main window, click or tap **[+ ADD]** to create a new task.

Now you can configure settings for your task:



Charging Mode
Select the desired charging mode for the task. The following options are available:



No charging

Completely disables the charging station.

Excess solar power with guaranteed charging

The *PV Surplus with Guaranteed Charging* mode **guarantees a minimum charging status for the vehicle**. If there is sufficient PV surplus, it is used. If there is no PV surplus, the vehicle is charged using grid with-

drawal up to the minimum charging power.

Excess solar power

In *PV Surplus* mode, EV charging is dynamically adjusted to the excess electrical energy.

Fast charging

In *Fast Charging* mode, the vehicle charges as quickly as possible.

Wiederholung und Start-/Endzeiten

Stellen Sie dann den **Wiederholungsintervall** ein und definieren Sie eine **Start- und Endzeit** für die Aufgabe.

Using **[+ ACCEPT]** saves the task and displays it in the overview of your charging station in the main window.

Edit Task

This main window displays your custom tasks (schedule).

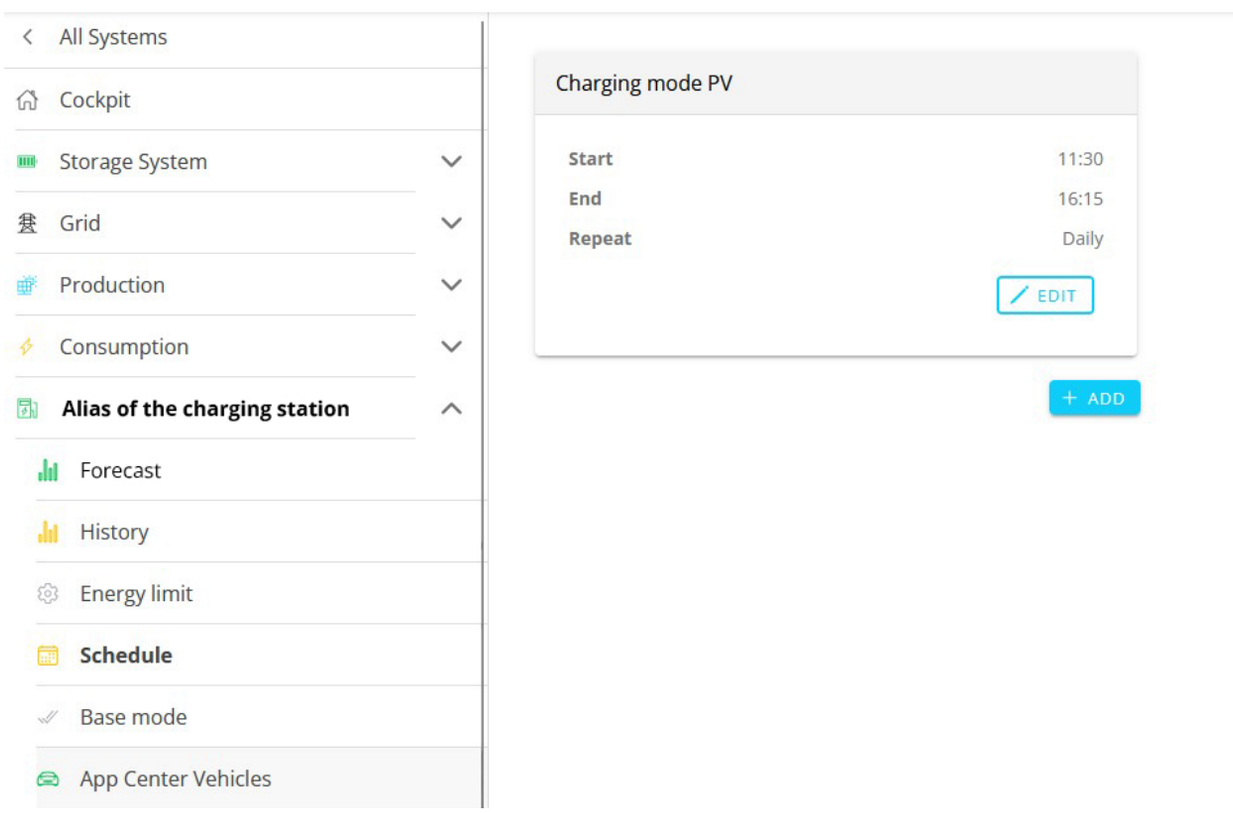


Image 9. Overview — Schedule with a created task

If you already have a task in the list, you can *EDIT* it to, e. g. adjust the time period or the charging mode during that time period.



Use **[ACCEPT]** to save your changes to the task.

Click/tap DELETE to delete the task.

7.6. Base mode

Click or tap the *Base Mode* menu item to open the following main window:

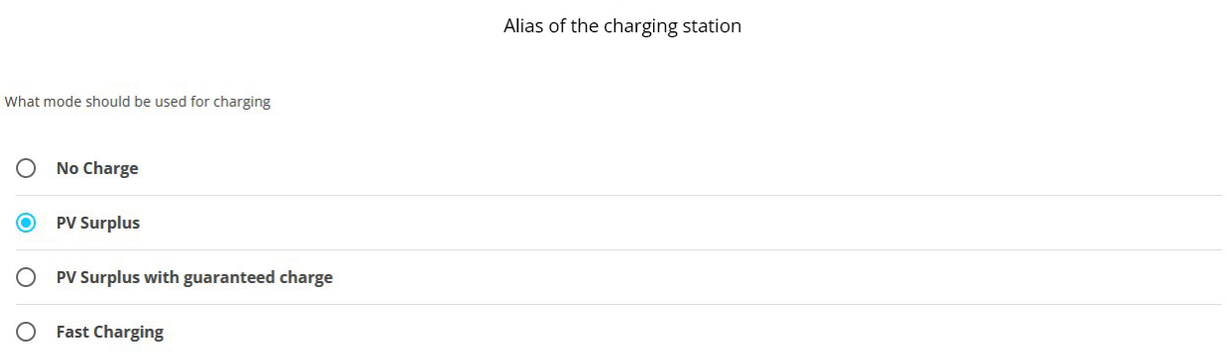


Image 10. Example — Overview — Base Modes

No charging

Completely disables the charging station.

Excess solar power

In *PV Surplus* mode, EV charging is dynamically adjusted to the excess electrical energy.

Excess solar power with guaranteed charging

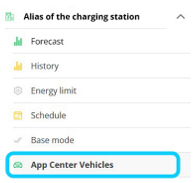
The *PV Surplus with Guaranteed Charging* mode **guarantees a minimum charging status for the vehicle**. If there is sufficient PV surplus, it is used. If there is no PV surplus, the vehicle is charged using grid withdrawal up to the minimum charging power.

Fast charging

In *Fast Charging* mode, the vehicle charges as quickly as possible.

Confirm the setting using the ☑ in the lower-right corner of the main window.

7.7. App Center Vehicles



Use this menu item to configure vehicle-specific settings.

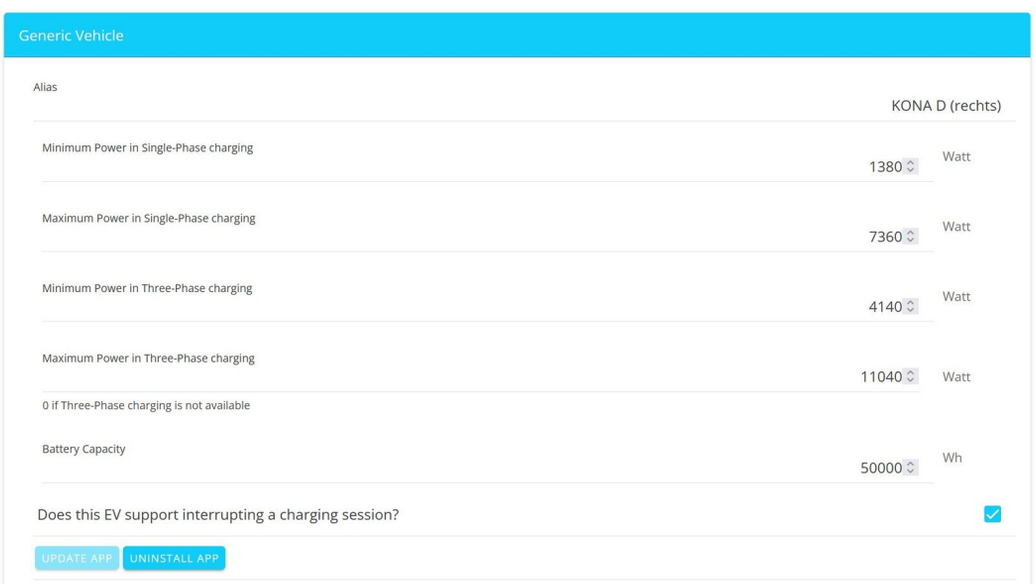
The main window displays the settings for the *Generic Vehicle* app.

The *Generic Vehicle* app is automatically installed when you install FEMS App KEBA KeContact.

Generic Vehicle means:

- The **primary vehicle** that is charged at this charging station by default.
- We recommend that you provide the correct model name of the vehicle.
- You can also define more than one vehicle.

The following settings are available for the connected Generic Vehicle:



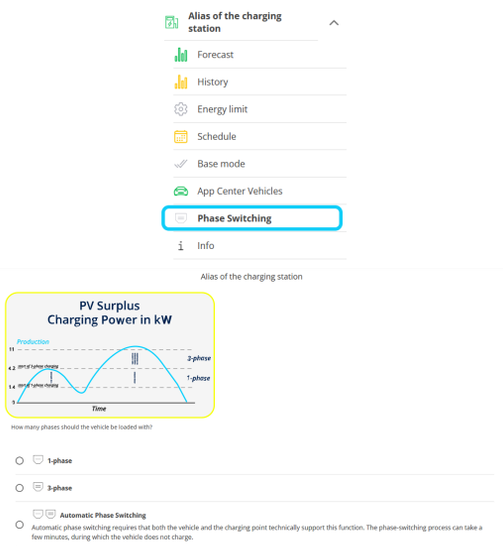
Once you have made the desired changes, save them by clicking **[UPDATE APP]**.



These settings provide EMS with more precise vehicle data, making the charging forecast for your vehicle more accurate. You can also enter your vehicle's model name here so that it appears in the app.

7.8. Phase Switching

If a PV charging mode (*PV Surplus* or *PV Surplus with guaranteed charging*) is selected for your charging station, you can manually switch from 1-phase to 3-phase charging in the submenu using the *Phase Switching* option:

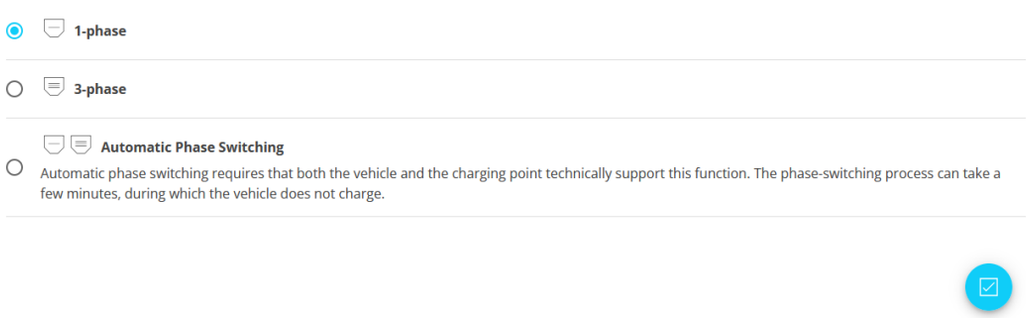


Tap or click the submenu item to access the following main screen.

The following options are available here:

- Manual Phase Switching, 1- or 3-phase
- Automatic Phase Switching

7.8.1. Manual Phase Switching



Use Case

One scenario would be to use the limited PV production to charge the vehicle anyway by manually switching to single-phase charging.

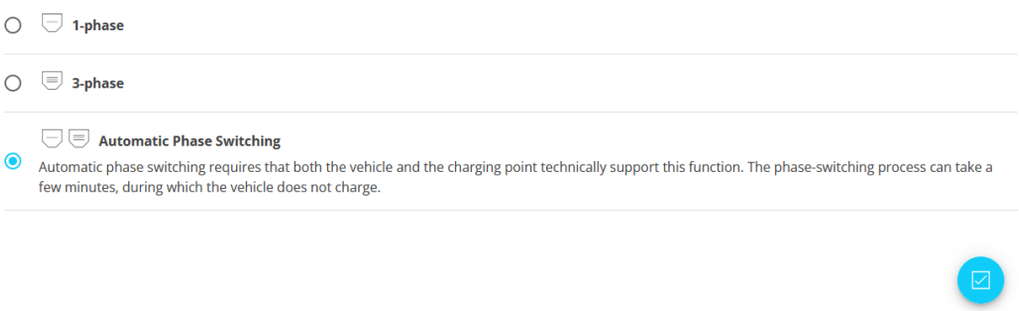
Switching During Charging:
When manually switching from single-phase to three-phase and vice versa, the hardware undergoes a 30-second switching process each time.

- Please wait during this switchover.
- During these 30 seconds, the charging power is reduced to 0 kW, and then the switchover occurs.

- When performing phase switching, vehicles behave differently depending on the model.
- Your vehicle must support phase switching.

7.8.2. Automatic Phase Switching

In addition to the Manual Phase Switching (1- or 3-phase), there is the option of Automatic Phase Switching:



The phases are automatically switched based on the charging power. This allows even a small amount of excess PV power to be utilized.

- The *Fast Charge* mode always uses 3 phases.
- Your vehicle must support dynamic phase switching.

- The switching times depend on the wallbox and its internal logic.
- The phase change may take a few minutes.

8. Communication failure between KEBA P40/P40 Pro and EMS

Article updated: 24/09/2026

Currently, the log partition of the KEBA P40/P40 Pro may reach its capacity limit, which requires the wallbox to be restarted.

This applies in particular to systems in which the electric vehicle remains plugged in for an extended period and charging is paused, for example in **OFF** mode or **PV Surplus** mode when no PV surplus is currently available.

KEBA and Heckert Solar are currently working on a solution to the issue.

We apologize for any inconvenience this may have caused.

Until KEBA provides a fix, only operating modes that guarantee a charge or a minimum charging current should be used. Operating modes that may pause charging for an extended period while the vehicle is connected should be avoided.

8.1. Fault pattern

- Error message: *Modbus Communication Failed*.
- The wallbox no longer responds to control commands.
- Communication between EMS and the wallbox is no longer possible.
- A wallbox restart may only partially resolve the issue, and even then only temporarily.
- In some cases, it is necessary to reset the wallbox to its factory settings.

8.2. Recommended interim solution

Until a compatible solution from KEBA and Heckert Solar is available, we recommend configuring the following settings, depending on the version you have installed:

→ Set the **Base Mode** to **PV Surplus with Guaranteed Charging** or **Fast Charging**.

or:

→ If the mode is set to **OFF** or **Manual**, change it to **Automatic** with **Guarantee Minimum Charging**.

In both cases, the wallbox is prevented from operating at a charging current of 0 A for an extended period of time.

8.3. Restarting the wallbox

To restart the KEBA P40/P40 Pro, follow these steps:

1. Stop the current charging process.

2. Disconnect the vehicle from the wallbox.
3. De-energize the KEBA P40/P40 Pro using the MCB or upstream main switch.
4. Please wait 30 seconds.
5. Turn the power back on.
   → This will restart the wallbox.

8.4. Reset to factory settings

1. Restart the KEBA P40/P40 Pro.
2. Check to see if communication between EMS and the wallbox has been restored.
3. If the problem persists, reset the wallbox to its factory settings using the KEBA web interface or app, and perform the commissioning process again.

9. Contact us

For support, please contact:

Symphon-E Service

Service phone: +49 (0) 371 45 85 68 - 100

E-mail service: symphon-e@heckert-solar.com

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