Configuration of Alfen Single S-line and Pro-line EV charger

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Environmental protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check your Local Authority or retailer for recycling advice.

Other information

Product information is subject to change without notice. All trademarks are recognised as the property of their respective owners.

User documentation is updated frequently; Check the Enphase website (enphase.com/support) for the latest information.

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Audience

This manual is intended for use by professional installation and maintenance personnel.

The Enphase IQ Energy Router (ER) is an integral component of the Enphase Energy System (EES). The IQ Energy Router integrates Enphase solar and storage systems with heat pumps and electric vehicles to maximize self-consumption and minimize costs. Installers should use the Enphase Installer App and the Enphase Installer Portal to install and maintain the system. Customers can use the Enphase App to monitor energy flows and control the system. After you have installed the IQ Energy Router, use this configuration guide to configure and set up the currently supported EV chargers.

Scope of this document

This document has been developed after obtaining permission from Alfen B.V. Observe the safety instructions of Alfen with respect to installation, operation, and maintenance from the Alfen Eve Single S-line and Pro-line manuals: Manuals and guides in available languages – Service – Alfen Knowledge Base. The information from Alfen B.V. might change and hence, when in doubt, contact Alfen Support.

Please ensure that the main fuse of the site and the circuit breakers are rated to the level required by the household loads and the EV charger(s) being installed. Also consider the charging power of the IQ Battery (if installed) and its ability to charge from the grid (if allowed by regulation).

For further information on the installation of the IQ Energy Router and other related components provided in the IQ Energy Router+ box, refer to the respective installation guides on the Enphase documentation page.

Preconditions for configuring the charging equipment

Complete the following steps before configuring the charging equipment:

- Follow the IQ Energy Router installation and commissioning instructions.
- Activate and configure the IQ Energy Router so that it can detect and connect to the other components such as EV chargers.
- Install the EV charger and connect it to the same customer network as the IQ Energy Router.
- If the EV charger is not already installed at the site, follow the respective installation and configuration instructions of the OEM. A current list of the supported EV chargers is found at IQ Energy Router documentation page.
- Use a laptop computer with the Windows operating system to download and access the Alfen ACE Service Installer application and to connect to the local customer network – available here: How do I configure charging stations using the ACE Service Installer configuration tool?
- Create an installer account with the Alfen support platform before visiting the customer to be able to log on to the Alfen ACE Service Installer tool
- Alternatively – get the Alfen myEve App from the respective providers: Google Play, App Store
- **Very Important**: Please ensure that the specific EVSE that is installed has an active license for "Active Load Balancing" – this can be checked by using both, the myEve App and the ACE Service Installer tools following this guideline: Check the Active Load Balancing functionality – Service – Alfen Knowledge Base. If the license is not yet available, it must be bought with the distributor that initially delivered the unit or directly with Alfen. For this follow the steps described here: How do I order extra feature licenses for a charging station?

Supported Alfen EVE Single models

Enphase supports Alfen EVE Single S-line and Alfen EVE Single Pro-line models that have an active license for "Active Load Balancing". This license enables the Modbus TCP interface of the Alfen EVSEs which is used by Enphase to connect to them. Please observe that the integration is developed for Alfen units that run a firmware version higher than 6.x.x.

Please ensure that the chargers are running at least on the latest firmware version supported by Enphase. Alfen publishes firmware updates regularly. An overview of firmware versions and their documentation is available here: Release notes - Firmware updates NG-Platform (NG-910 / NG-920) - Installation - Alfen Knowledge Base

Enphase is retesting the technical integration with new firmware versions to ensure full functionality. A current list of the supported firmware by vendor is available here: Third-party EV charger firmware versions that support integration with the Enphase Energy System - Support | Enphase

Accessing the Alfen ACE Service Installer Application

In order to access the settings menu of the Alfen EV charger, the ACE Service Installer tool is needed. This is available only for computers with a Microsoft Windows operating system. To download the program, go to the download section of Alfen website. Make sure to access the most recent version of the tool.

To log on to the ACE Service Installer, an account with the Alfen support platform is needed. To obtain the account, signup here. Installers who already have an active account with Alfen and have the ACE Service Installer tool available on their mobile computer can progress to the next sections. To obtain a new account follow these steps:

1. Click the "Request for Sign-Up" after completing the sign up and enter the required information.

2. Enter the full name and the business email address of the installation company. In the Additional information (required) text box, enter the reason for the account creation and click "Create". The login details for the tool are sent to the specified E-mail address.
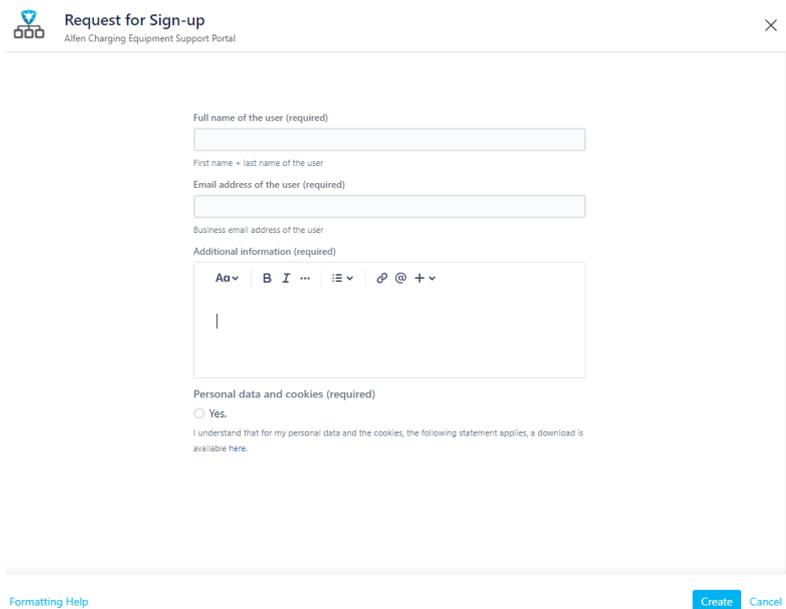
Note: Download the Alfen program and create an account before visiting the homeowner. Account creation can take up to **two business days** according to Alfen.

For information on the account creation, go to How do I receive login details for the ACE Service Installer configuration tool? – Installation – Alfen Knowledge Base

Accessing the myEve Application

Alternatively to the ACE Service Installer tool, the myEve Application can be used to find and configure Alfen EV chargers in the customer network. The myEve App is available in the respective app stores: Google Play, App Store
Please follow the instructions given by the app sign up process. The app can also be used without an account, but functionality might be limited. For further information on the myEve app please visit: What is the MyEve app? – Installation – Alfen Knowledge Base

Alfen Single S-line and Pro-line – Adding a "Active Load Balancing" License Key

Adding the License via ACE Service Installer

Access to the Alfen requires a password that comes on a leaflet attached to the EV charger. This leaflet should remain with the station owner after the installation and configuration, as it also holds a recovery password.

1. Log on to the installer tool using the owner or your respective installer account and enter the (default) admin password printed on the leaflet. In case this password has been changed, please ask the owner to provide it for this setup process.

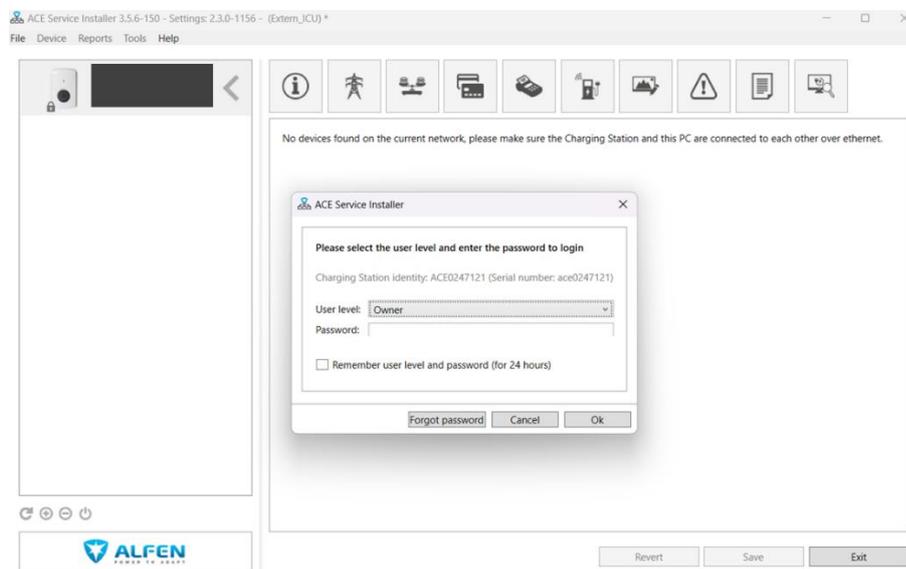Image: Example for password leaflet attached to the charger.

Image: Log on dialogue of the ACE Service Installer

2. Ensure that you are connected with your mobile computer to the same network as the Alfen charging station, after logging on to the installer tool. At start up, the tool imports the most recent firmware updates and settings, and scans for Alfen chargers in the network. If the charger is not detected by the ACE Service Installer tool, follow the instructions listed under What should I do if a charging station is not visible in the ACE Service Installer? – Service – Alfen Knowledge Base.

3. Please ensure that you have the license code for "Active Load Balancing" ready. If the license is not yet available, it must be bought with the distributor that initially delivered the unit or directly with Alfen. For this follow the steps described here: How do I order extra feature licenses for a charging station?

4. Please navigate to the following menu ➔ **Information** ➔ **License key** and enter the obtained license key for the Active Load Balancing feature. After entering click on "*update license key*" and or "*Save*" to let the station take over the settings.
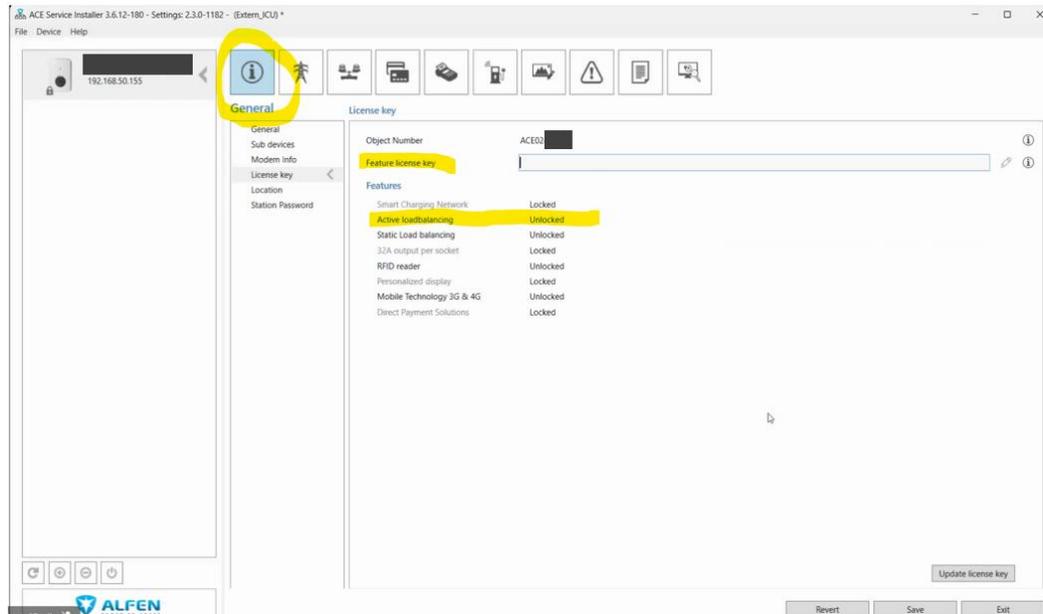
 July2024

Image: Screenshot of ACE Service Installer for license settings

5. Please ensure after this setting that the state for "Active load balancing" is now "Unlocked" in the overview below the line where the license key is entered.

6. After the license is unlocked, please navigate to the "Load Balancing" section and select "Energy Management System" as the "Data Source". Please save the changes by clicking on "Save".
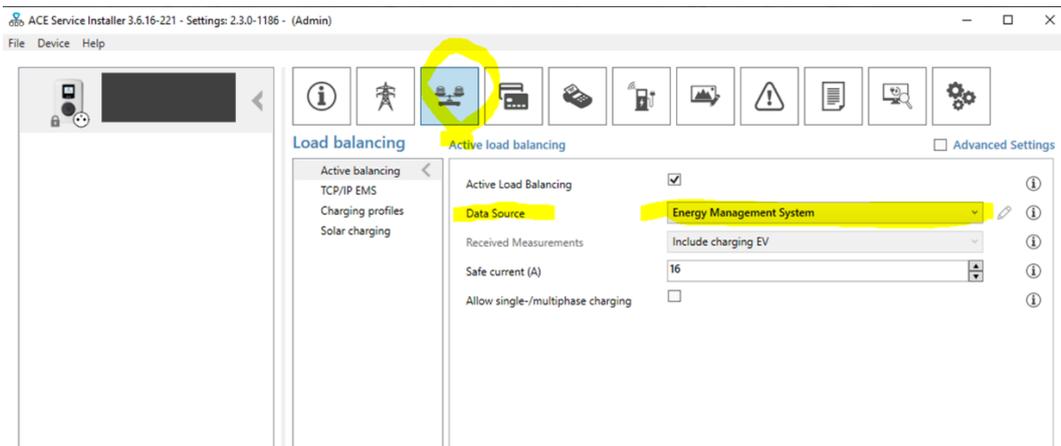

Image: Screenshot of ACE Service Installer for Active Load balancing settings

7. The configuration of the Alfen charging station is now complete. The next steps are addressed in the Enphase Installer (ITK) app in step 2 – "Devices & Array".

Adding the license code via the myEve App

The myEve App can also be used to add an "Active Load Balancing" license. Please log on to the app and search for the respective charging station in the network. The app will scan the local network to which it is connected also on start up.

If the detection does not work directly, pease repeat the process and follow the instructions given here:
[What should I do when I get a connection error with my charging station in the MyEve app? – Installation – Alfen Knowledge Base](#)

1. After successful detection, the logon password from the leaflet provided must be entered or scanned to access the settings of the charging station.
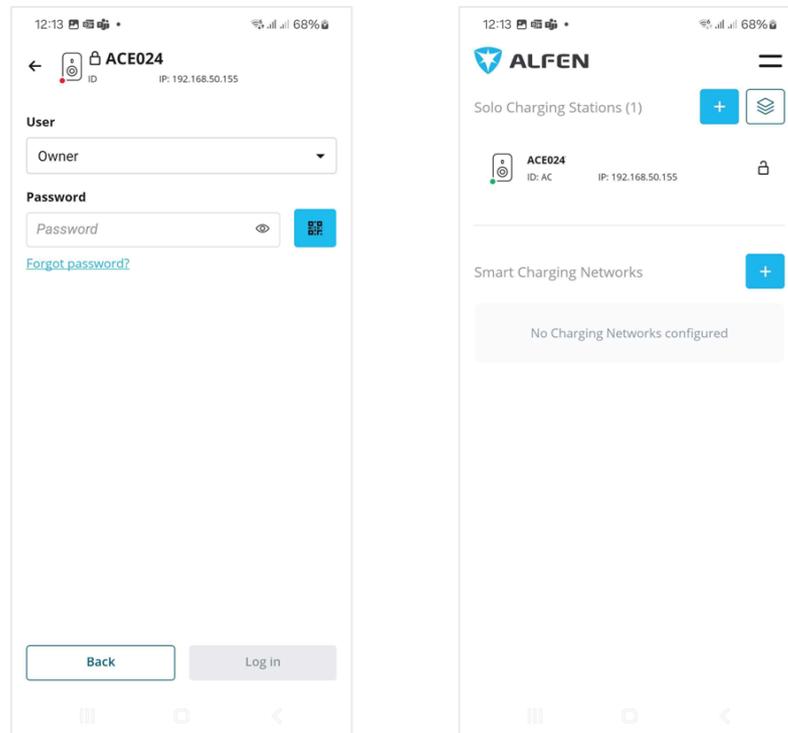

Image: Screen capture of the myEve app and the log in dialogue

2. Please ensure that you have the license code for "Active Load Balancing" ready. If the license is not yet available, it must be bought with the distributor that initially delivered the unit or directly with Alfen. For this follow the steps described here: How do I order extra feature licenses for a charging station?

3. After successful log on to the EV charger – please go to this section: **Advanced → General →** license key and add the license key for "Active load balancing"
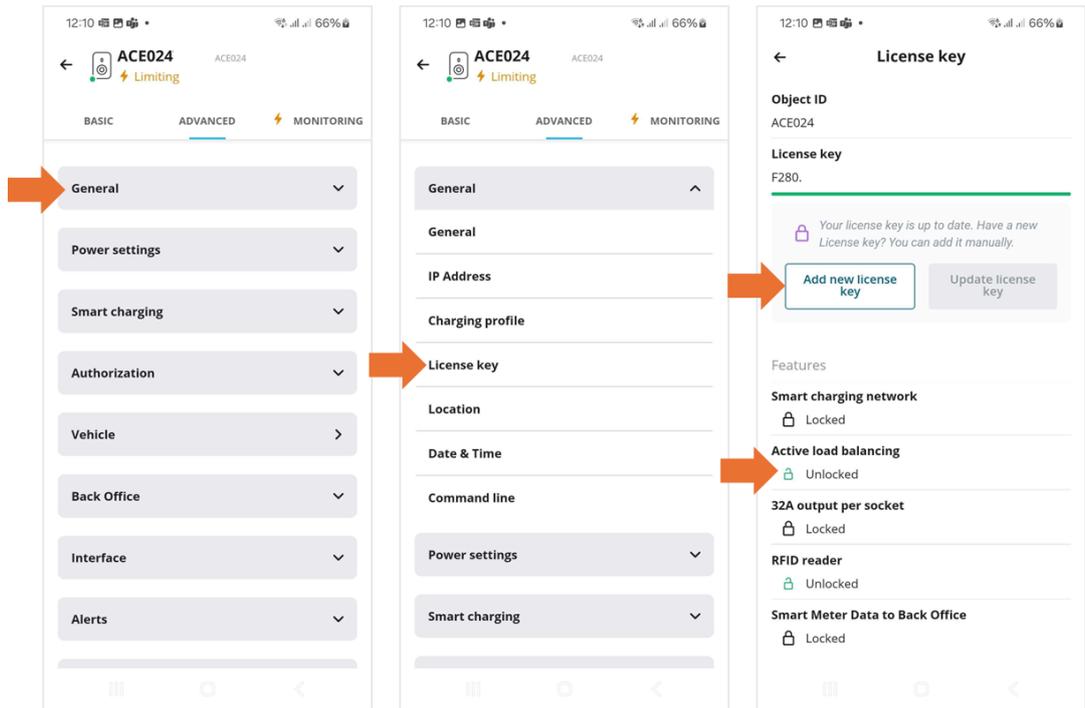
Image: Screen capture of the myEve app and the license settings

4. Please ensure after this setting that the state for "Active load balancing" is now "Unlocked" in the overview.
5. After the license is unlocked, please navigate to "Smart Charging" and select "Active load balancing" and then "Energy Management System" as the "protocol". Ensure that the settings have been saved / persisted with the unit.
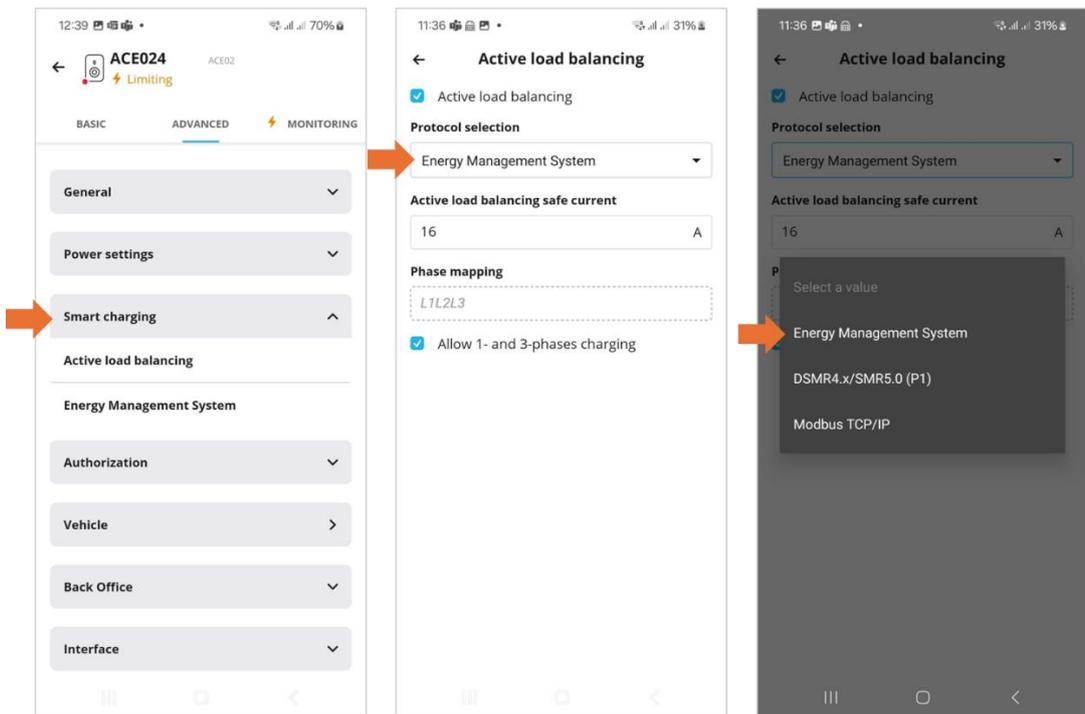

Image: Screen capture of the myEve App and the Energy Management settings

6. The configuration of the Alfen charging station is complete. The next steps are addressed in the Enphase Installer (ITK) app in step 2 – "Devices & Array".

![ENPHASE.]

Commissioning the Alfen EV Charger via Enphase Installer App

The last step involves the validation and commissioning of the Alfen EV charger in the Enphase Installer (ITK) app. Please follow the following steps.

1. Open the Enphase Installer App and select the respective site.

2. Go to step 2 "Devices & Array"

3. The IQ Energy Router should already have been added to the site. If not, please follow the installation instructions from the documentation page. The IQ Energy Router needs to be installed, powered on and connected to the same customer network as the Alfen EV charger with the activated "Active load balancing" license.
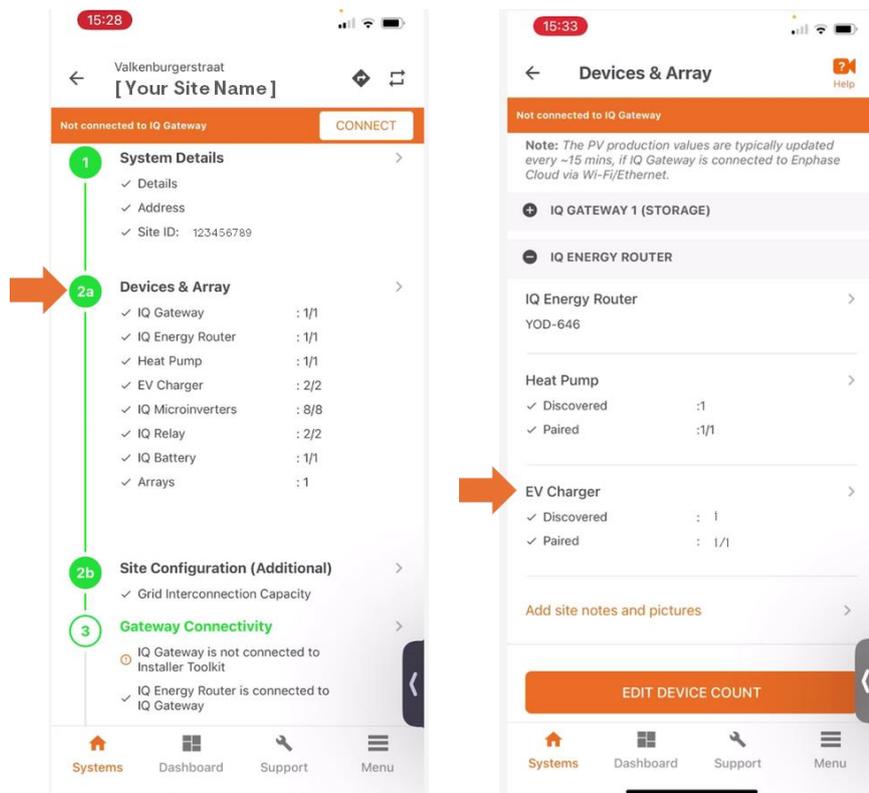

Image: Screen capture of the Enphase Installer app where the auto discovery of the Alfen EV charger can be validated.

4. The IQ ER will start an auto discovery process which upon successful completion will auto pair the Alfen VEV charger to the site. If discovery is not successful on the first try, please refresh the page and allow for up to 5 minutes for the discovery and pairing process.

5. When the Alfen EV charger is paired, the normal commissioning process as guided by the Enphase Installer app can be continued.

6. The setup of the Alfen EV charger is now completed.

In case of further problems with the discovery process please consult our FAQ and Support Article pages or get in touch with Enphase customer support.

References

Current installation manuals, product brochures, and further information for Alfe Eve Single S-line and Pro-line models can be obtained at: [Manuals and guides in available languages – Service – Alfen Knowledge Base](#)
The myEve application and all documentation of Alfen can be found in the sources linked below:

myEve App (Android)

myEve App (iOS)

Alfen Knowledge Base

Revision history

Revision	Date	Description
1.0.0	August 2024	Initial version of configuration manual for Alfen Eve Single EV chargers.

 July2024