

Connect GARO to Reduxi

Connect the GARO charger to the Reduxi Controller via OCPP over Ethernet or Wi-Fi. The flexibility of the Reduxi system reduces costs by up to 30%.

🏢 GARO Entity · Reduxi Controller

🌐 OCPP 1.6 JSON (Ethernet or Wi-Fi)

📱 GARO Connect app for charger setup



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1 Technical documentation

GARO documents for the Entity charger:

- [EV charging home – GARO Entity](#) – Brochure (PDF)
- [Charging cooperative and company – GARO Entity](#) – Brochure (PDF)
- [GARO download page](#) – Brochures and certificates
- [GARO Entity PRO](#) – Product page

2 Required equipment

You need these items:

- ☐ GARO Entity charger
- ☐ Reduxi Controller
- ☐ Smartphone with the GARO Connect app ([Point 3](#))
- ☐ Wi-Fi network or LAN that the charger and the Reduxi Controller both use
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

3 Set up the GARO charger in the GARO Connect app

3.1 Install the GARO Connect app



GARO Connect app

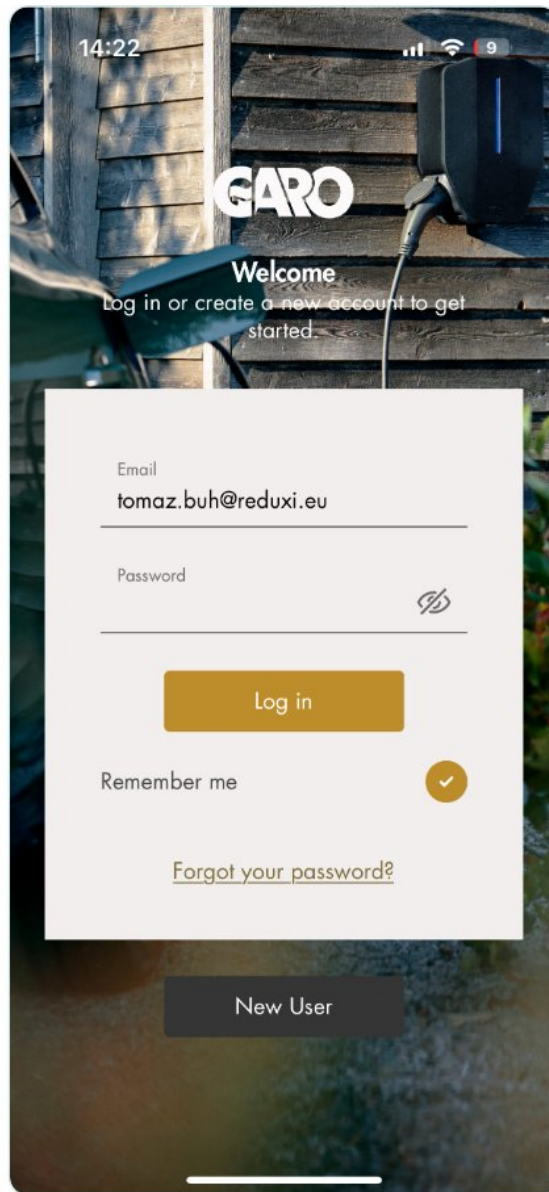
The app is available in both stores:

- Google Play Store: https://play.google.com/store/apps/details?id=se.garo.nxt&hl=en_US
- Apple App Store: <https://apps.apple.com/us/app/garo-connect/id1534289157>

For the first connection of the charger, watch the video tutorial **First GARO Entity Connection: GARO Entity video**

3.2 Log in or register in the GARO Connect app

Open the app and log in. To create a new account, tap **New User**, then log in.



Login and registration

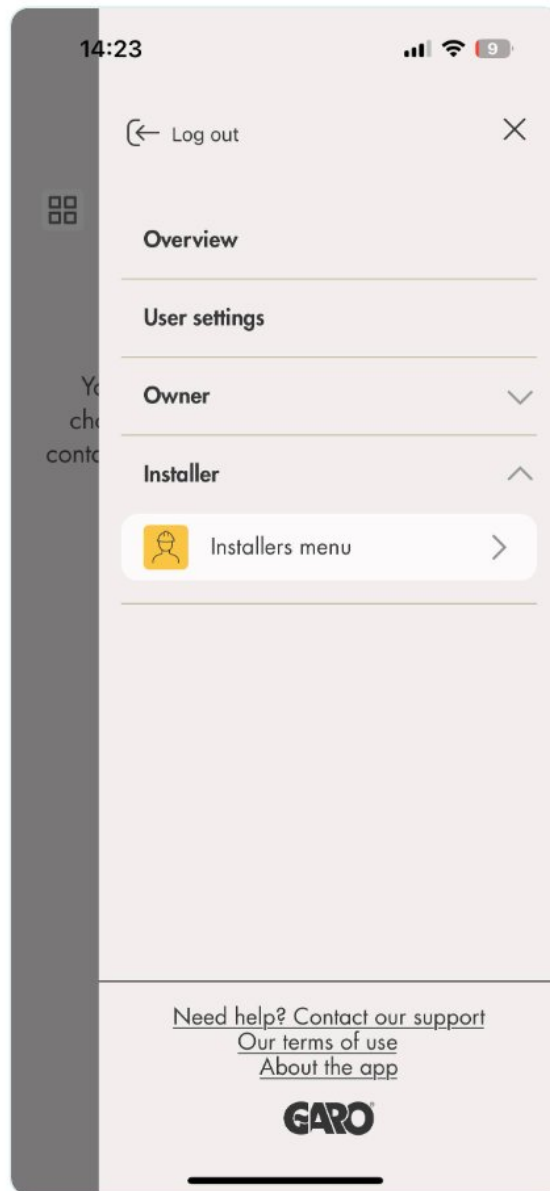
| 3.3 Add a new GARO charger

Follow these steps in the GARO Connect app:

1

Open the Installation Menu

Tap the menu icon in the top-right corner and select **Installation Menu**.

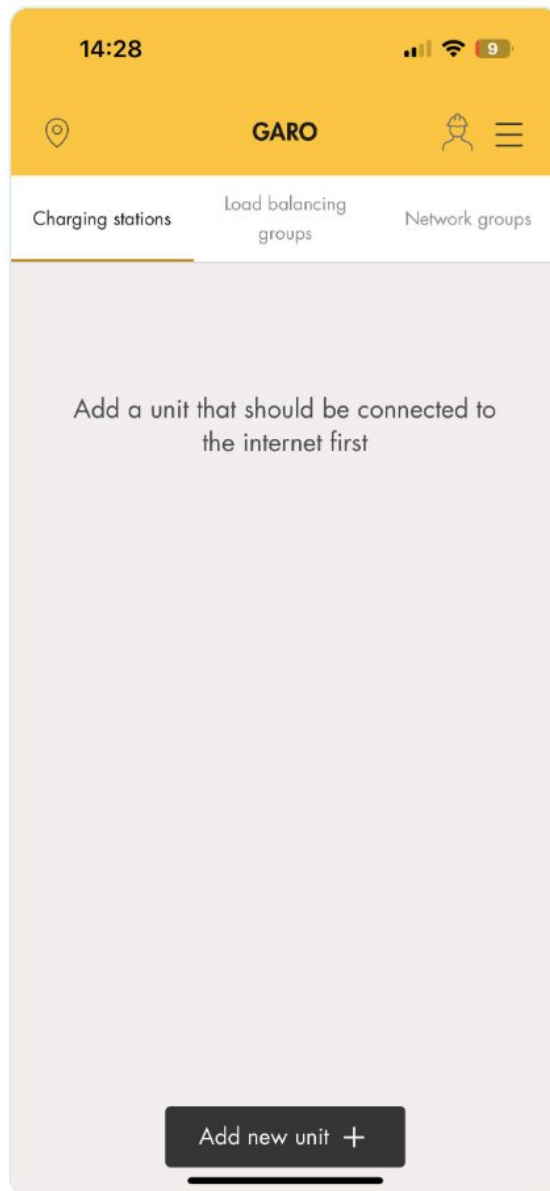


Installation Menu

2

Add a new unit

A new menu appears. Tap **Add New Unit** at the bottom center.

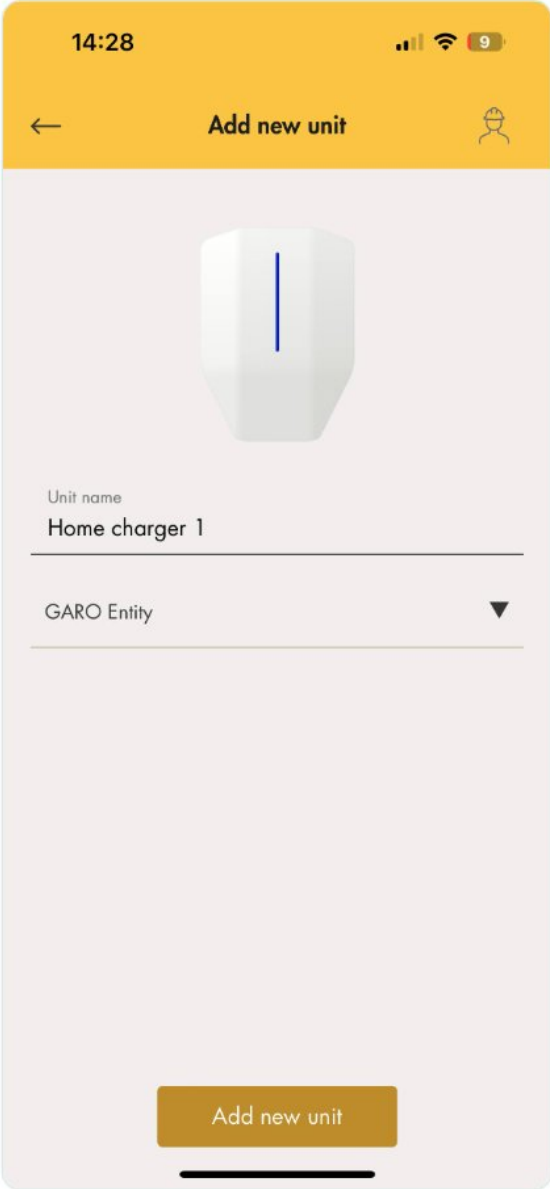


The Add New Unit button

3

Name the unit and select the type

Name your unit and select the GARO charger type from the dropdown menu. Choose **Entity**. Then tap **Add New Unit** at the bottom center.



14:28

← Add new unit

Unit name

Home charger 1

GARO Entity ▼

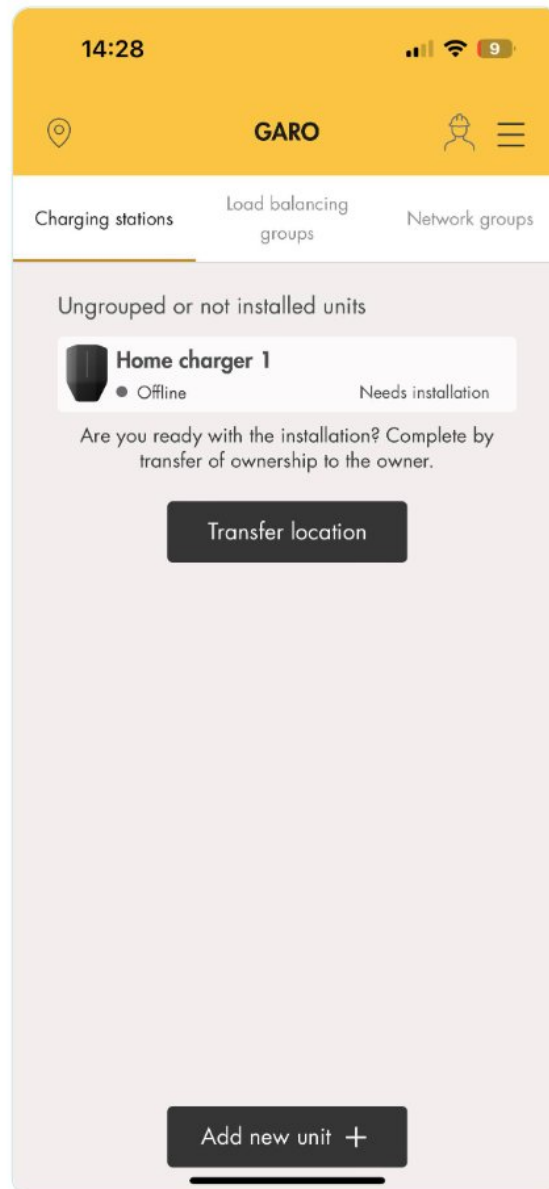
Add new unit

Unit name and charger type

4

Open the new device

Tap the newly added device (*"Need installation is offline"*).



The new device in the list

5

Start the installation

A new installation menu opens (0/5). Read the instructions and tap **I have understood** at the bottom center.



Installation instructions

6

Set group name and maximum current

Name the group and set the maximum current for the station. Tap **Next** at the bottom center.

14:29

Home charger 1
Installation progress: 0 / 5

Each unit that is installed belongs to a group. This applies to the installation of individual units.

Group name
Group Garo

Group/Charging station max current (A)
16

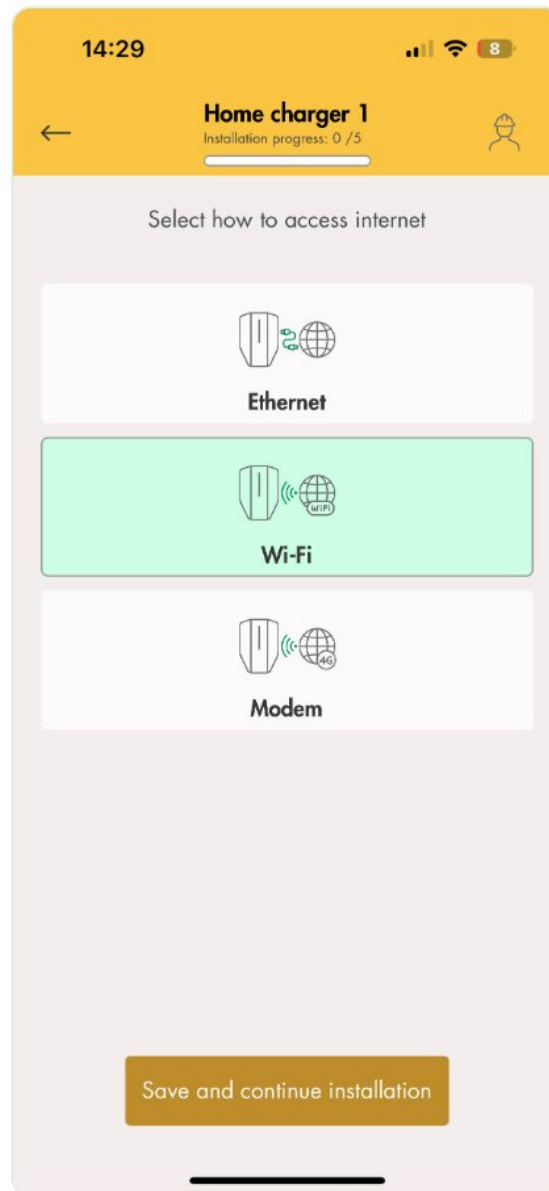
(6 - 6000 A)

Next

Group name and maximum current

Select internet access

Select the internet access option. Tap **Save and continue installation** at the bottom center.

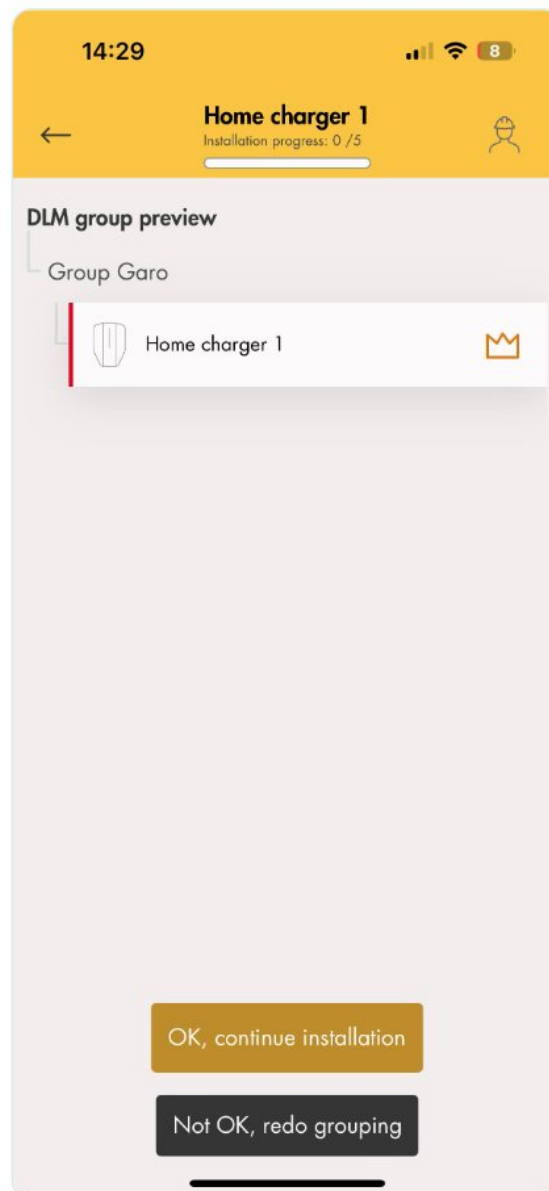


Internet access option

8

Check the installation group locations

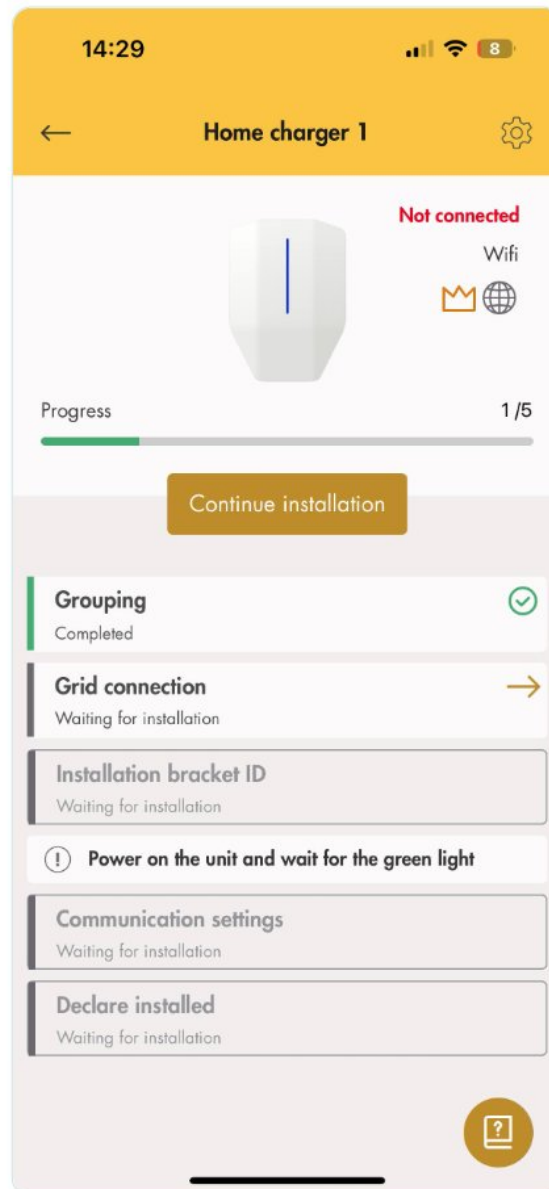
A new menu shows the installation group locations. Tap **OK, continue installation** at the bottom center.



Installation group locations

Continue to the network connection

A new menu opens for the network connection. Tap **Continue installation** in the center.



Network connection menu

Enter the network connection details

Enter the required network connection details according to the GARO charger specifications. Tap **Grid connection tested OK, confirm settings and proceed** at the bottom center.

14:29

Grid connection
Home charger 1

Installation bracket max current (A) ⓘ
16

Number of enabled phases for bracket
1-phase 2-phase 3-phase

Phase rotation for bracket
0.RST

TN400V phase rotation

Bracket				
PE	L1	L2	L3	N
PE	L1	L2	L3	N
PE	L2	L3	L1	N
PE	L3	L1	L2	N

Restore default

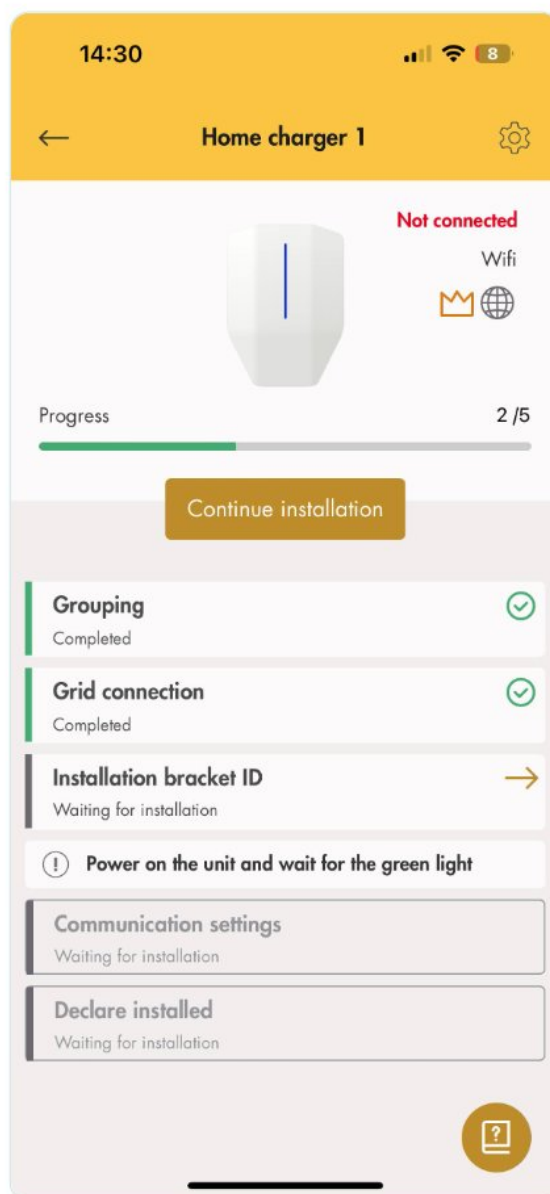
Installation manual ⓘ

Grid connection tested OK, confirm settings and proceed

Network connection details

Continue to the bracket installation ID

Tap **Continue installation** in the center.

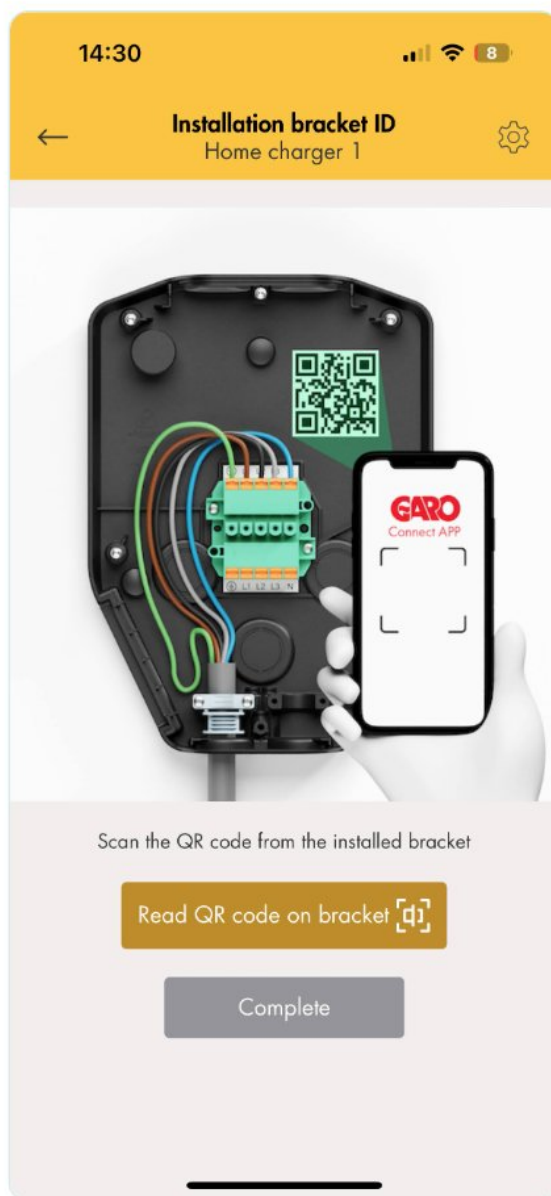


Bracket installation ID

12

Scan the QR code

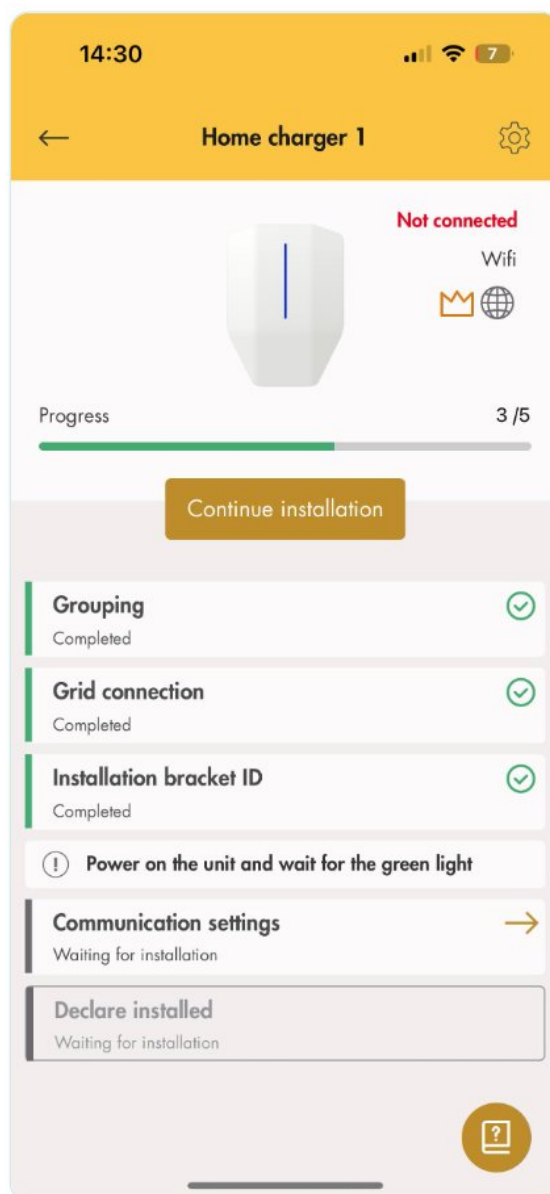
Scan the QR code on the front or back of the GARO charger. Tap **Read QR code on bracket** in the center.



Scan the QR code of the charger

Continue to the communication settings

Tap **Continue installation** in the center.



Communication settings menu

14

Turn on the charger

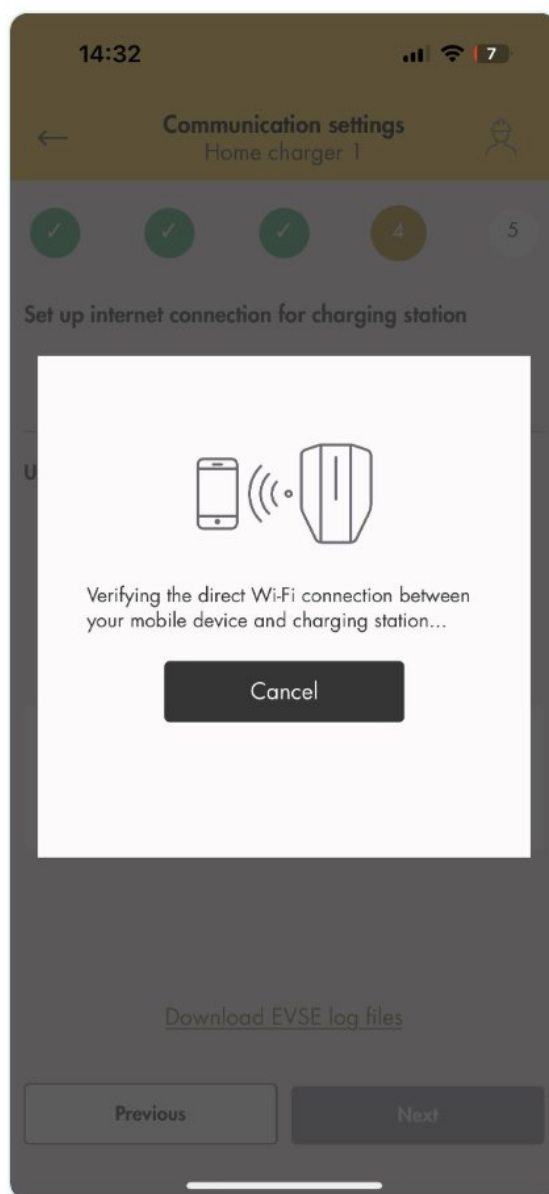
Turn on the GARO charger and tap **Next** on the right.



Turn on the charger

Start the direct Wi-Fi connection test

A direct Wi-Fi connection test appears.



Direct Wi-Fi connection test

16

Join the offered Wi-Fi network

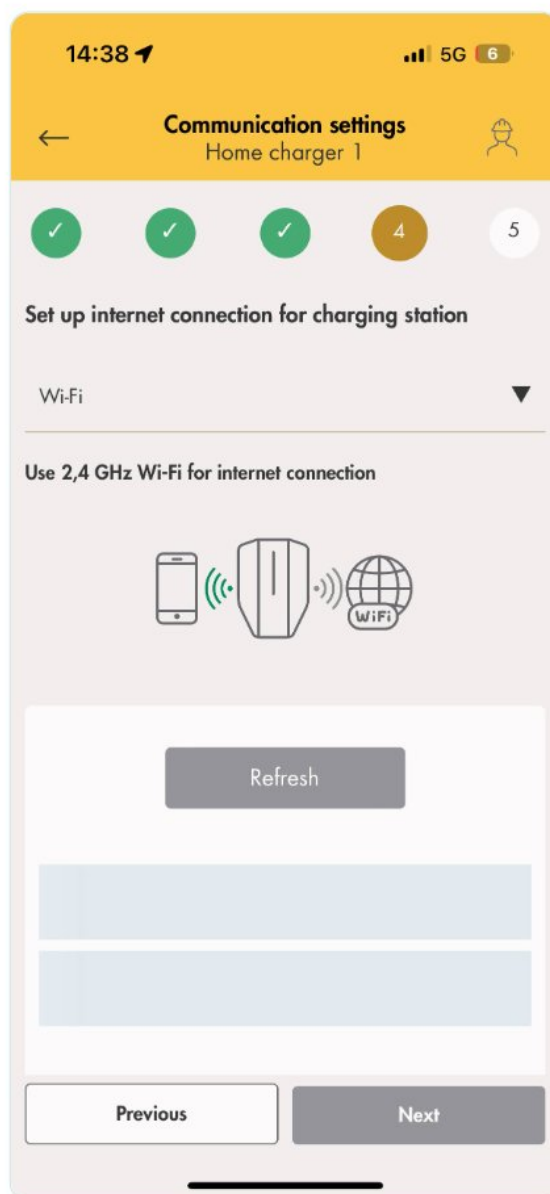
Join the Wi-Fi network that the phone offers.



Offered Wi-Fi network

Check the connection to the phone

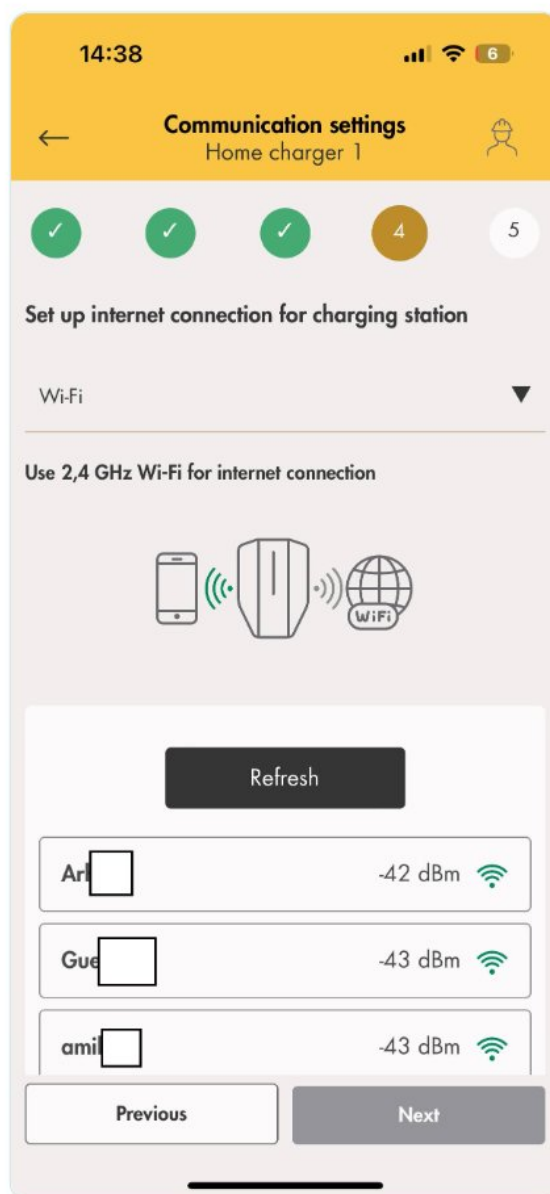
The app shows the connection between the GARO charger and your phone.



Connection between charger and phone

Select the Wi-Fi network of the charger

Select the Wi-Fi network to which the GARO charger will connect. Tap **Next** on the right.



Wi-Fi network selection

Enter the Wi-Fi password

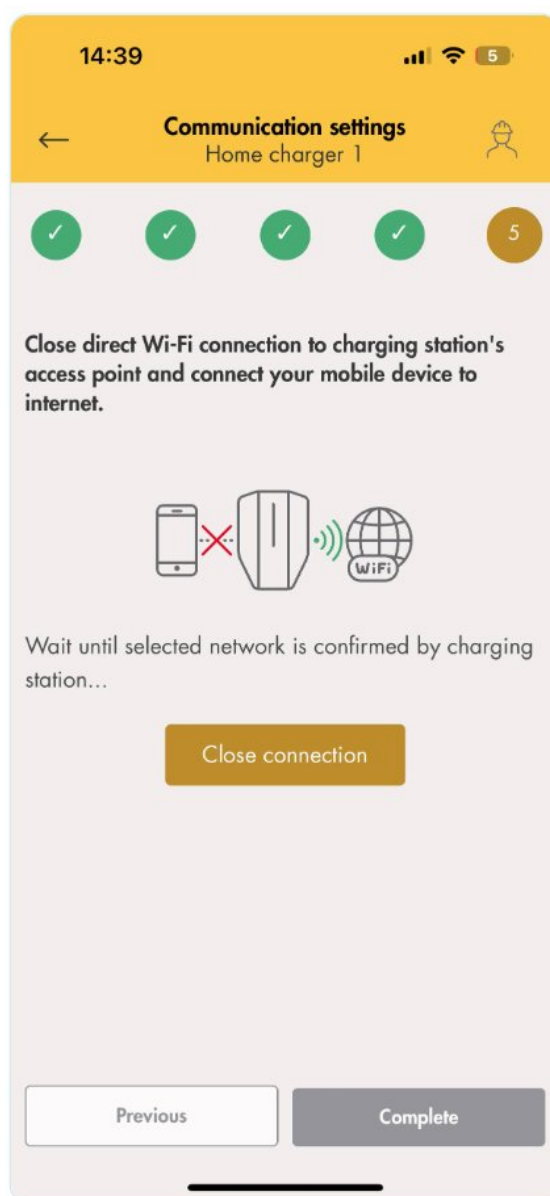
Enter the password. Tap **Connect** in the center.



Wi-Fi password entry

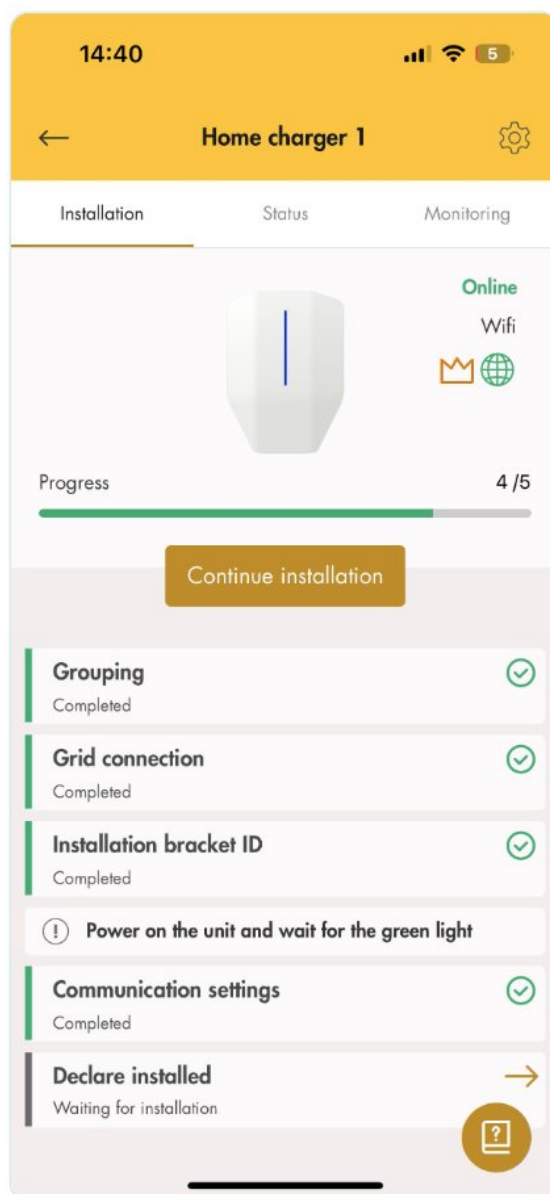
Close the direct connection

When the direct connection is closed, tap **Close connection** in the center. Then tap **Complete**.



Close connection and Complete

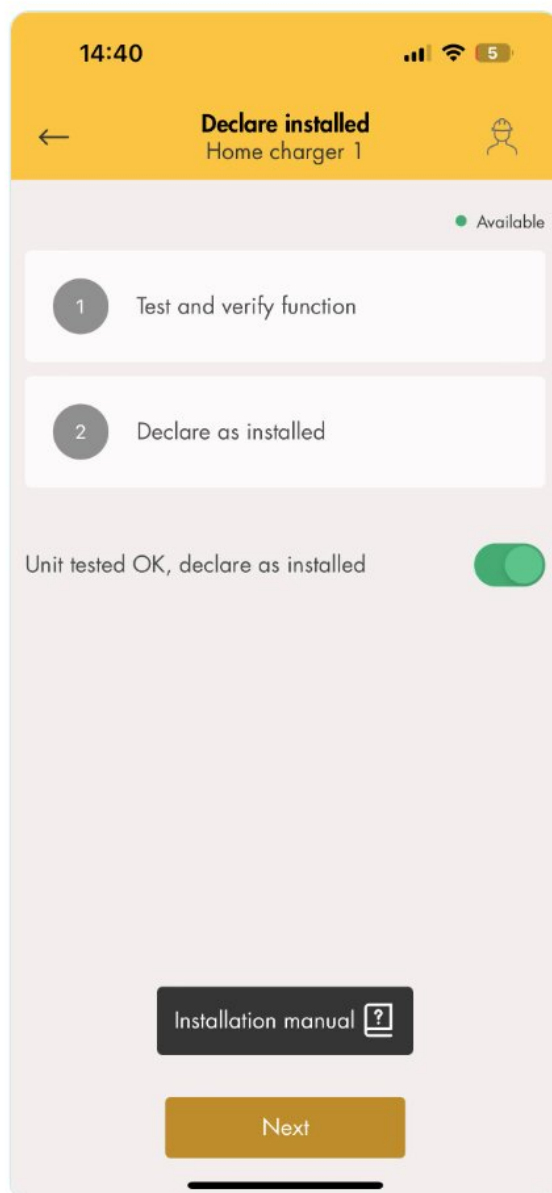
Tap **Continue**.



Continue screen

Test and declare the charger as installed

A new menu offers a **Test** and verification function and the **Declare as Installed** option. If the tests succeed, confirm that the GARO charger is installed and tap **Next**.

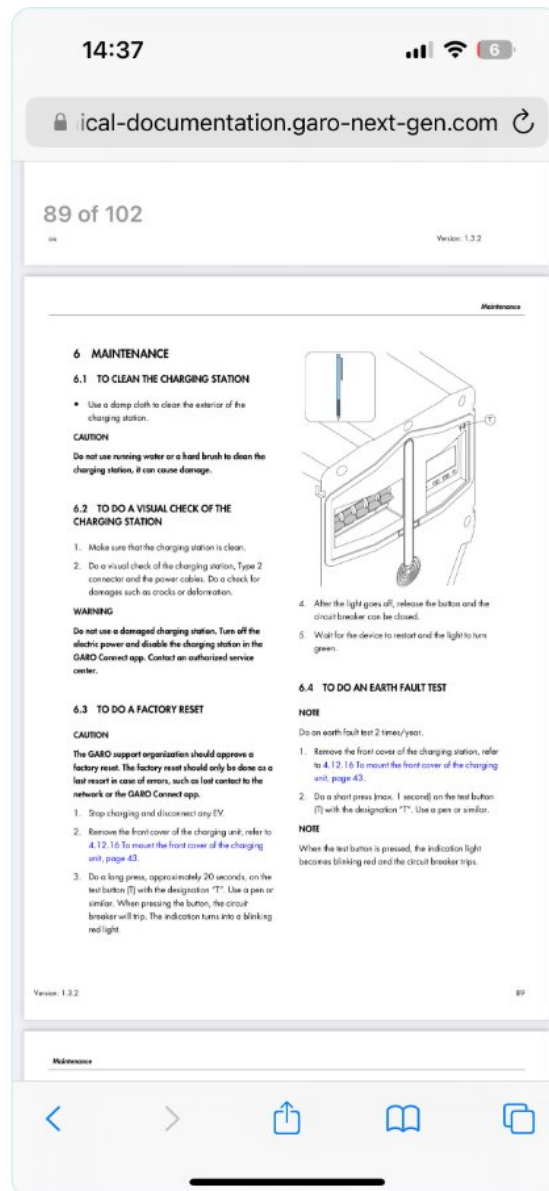


*Test and **Declare as Installed***

3.4 Factory reset

A factory reset is required when you move the charger or connect it to a different network.

- Press and hold the test button for 20 seconds.
- Configure the GARO charger again afterwards (Point 3.3).



Test button: hold for 20 seconds

4 Connect the charger and the Reduxi Controller to the same network

The Reduxi Controller and the GARO charger must be on the same network (LAN or WLAN) to communicate. Use the same network that you selected for the GARO charger in [Point 3.3](#) (Wi-Fi network selection).

When this is the case, continue with the OCPP configuration.



Network of the GARO charger

5 Log in to the Reduxi web interface

You can open the Reduxi web interface in two ways:



REMOTE

Reduxi app

Via tunnel connection · works from anywhere



Web browser

In the local network · via IP address or reduxि.local

5.1 Via the Reduxi app

1 Open the app and log in

Launch the Reduxi app on your smartphone or tablet and log in with your credentials.

2 Open Reduxi devices

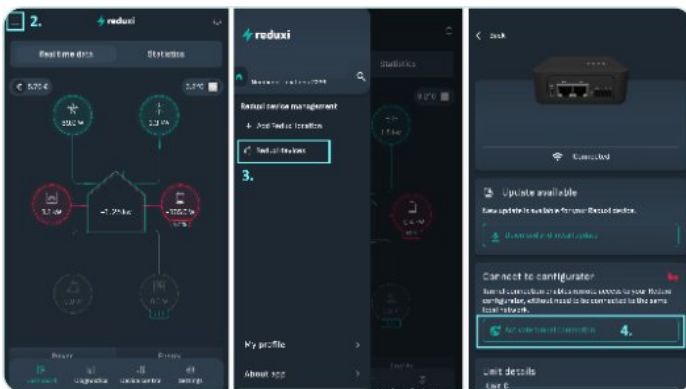
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

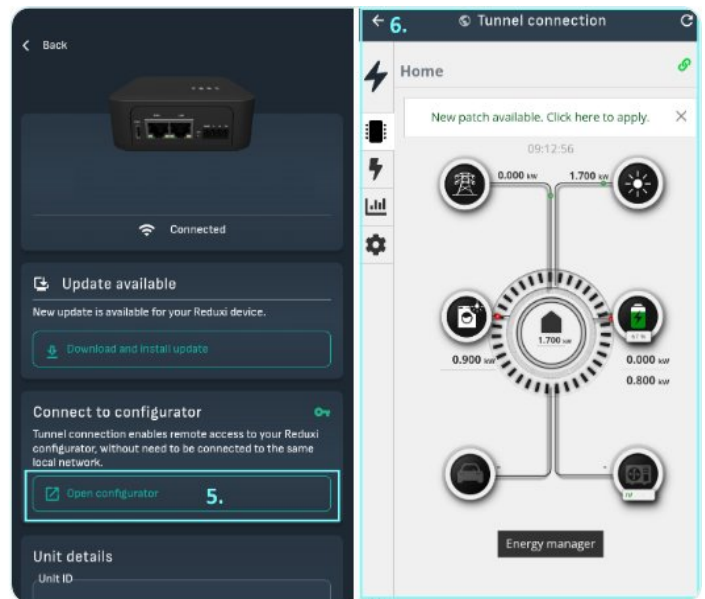
Switch on the tunnel connection and wait a moment until it is active.

4 Open the configurator

Tap **Open configurator**. The Reduxi web interface opens.



Activate the tunnel connection (step 3)



Open configurator (step 4)

5.2 Via a web browser

1 Open the login page

On a device in the same network, open a web browser and enter the controller's IP address or <http://reduxi.local>. You can find the controller's IP address in your router's device list or in the Reduxi app under **Reduxi devices**.

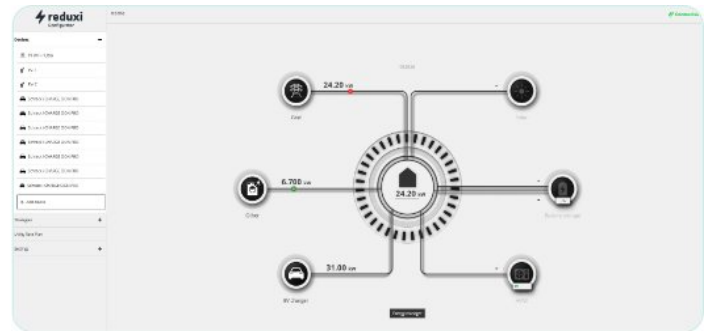
2

Log in

Username: **admin** · Password: **admin** (factory default)



Reduxi Controller login screen



Controller web interface after login

6 Add the GARO charger to Reduxi

Use these steps to add a new GARO charger or to edit an existing one. The charger communicates with the Reduxi Controller via OCPP.

6.1 Basic settings

Log in locally to the [Reduxi Configurator](#) on the controller (see [Point 5](#)) and click **+ Add device**.

reduxi[⚡]

CONFIGURATOR

Devices



Strategies



+ Add device

+ Add strategy

Settings

Profile

The Add device button

In the first step, select the basic parameters:

- Device type: **EV Charger**
- Protocol: **OCPP 1.6 - JSON**
- Name: a name of your choice, for example **GARO Entity**

1

2

3

Basic settingsCommunication channelAdvanced settings

Basic settings

Device type *

Type *

Name *

Back

Next

Basic settings: device type, protocol and name

6.2 Communication settings

The second step sets the communication channel and tests the OCPP communication. Enter these values:

PARAMETER	VALUE
Device identifier	The identifier you obtained from the GARO charger
OCPP server URL	Generated by the Reduxi Controller. Copy it from the communication channel. Example: <code>ws://192.168.1.121/ocpp/1.6/json/</code>

Device configuration

Device identifier *

Garocs-43A4DB2076B80

Connector *

1

Charger type *

AC

Energy counter

Default

Allocate power to EVSE when EV is not connected to EVSE

Default

Per phase max. current *

Manual override

Per phase max. current manual override

32

In effect when manual override is selected

Forward communication to backend OCPP server

wss://csms.garo-next-gen.com:443

Forward measurements to backend OCPP server once every

Allow new charging session

Always

Controller OCPP JSON 1.6 URL

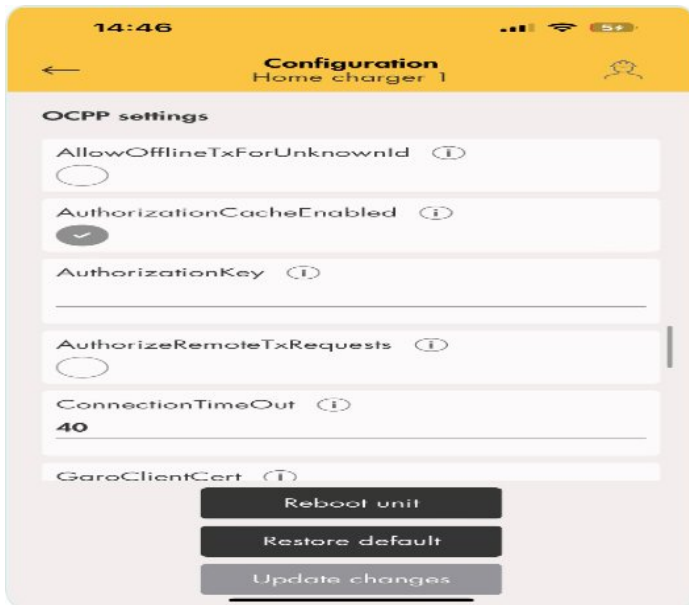
ws://192.168.1.121/ocpp/1.6/json

Communication settings with the OCPP server URL

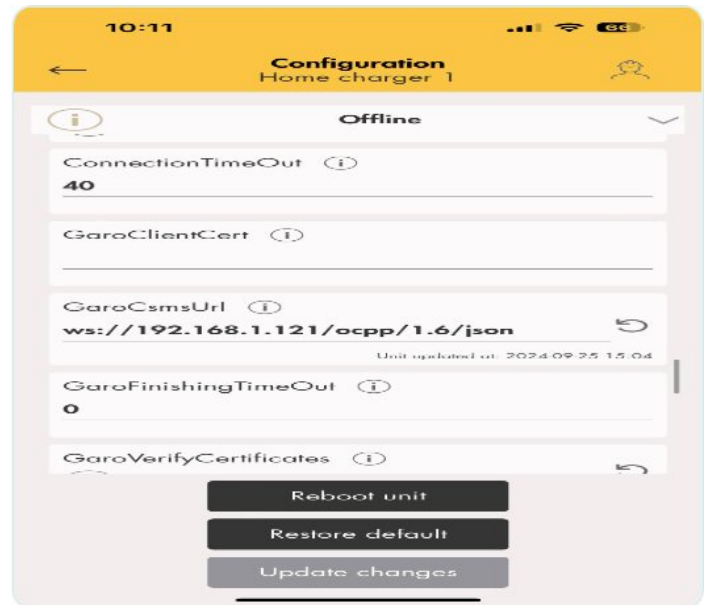
6.3 Enter the OCPP server URL in the GARO charger

Paste the JSON URL from the Reduxi Controller into the GARO charger to enable the OCPP connection.

- Open **Configuration** on the GARO charger, then **OCPP Settings**.
- Scroll down to **GarocsURL** and paste the URL.



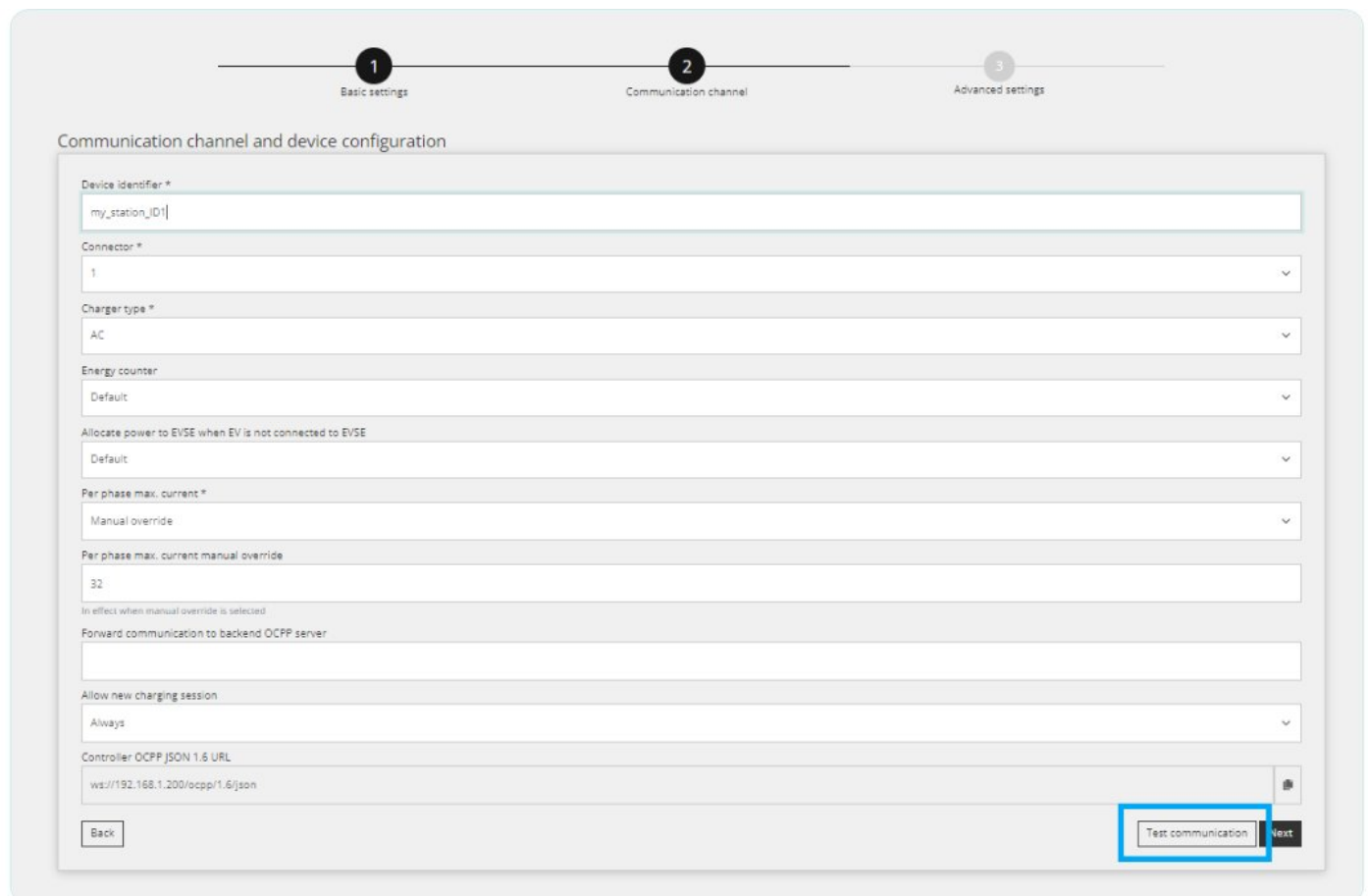
1. OCPP Settings in the GARO charger



2. GaroCsmsURL field

6.4 Test communication

Click **Test communication** at the bottom right, below the communication channel fields. It checks the OCPP communication.



The **Test communication** button

The test returns one of three results:

- **Success:** communication works correctly.
- **Error 1:** the controller cannot communicate with the device. The device identifier is not set or is incorrect.
- **Error 2:** no OCPP 1.6 compatible device is available.



1. Success



2. Error 1: identifier



3. Error 2: no OCPP 1.6 device

6.5 Advanced settings

Configure the advanced settings and select the parameters as shown in the image. The settings may vary with the needs of the location.

The screenshot shows the 'Advanced settings' screen with a progress bar at the top indicating three steps: 1. Basic settings, 2. Communication channel, and 3. Advanced settings. The 'Advanced settings' section contains the following options:

- Do you want to set data saving interval? ☒ No (Default: 1 min)
- Do you want to set reading delay? ☒ No (Default: 1000 ms)
- Do you want to set writing delay? ☒ No (Default: 1000 ms)
- Do you want to set power generation limits and capabilities? ☒ No
- Do you want to set power consumption limits and capabilities? ☒ No
- Do you want to limit communication with the device to read-only? ☒ No (Default: No)
- Do you want to invert direction for energy import and export? ☒ No (Default: No)
- Do you want to exclude device from summary? ☒ No (Default: No)

At the bottom, there are three dropdown menus for 'L1 is connected to main feed', 'L2 is connected to main feed', and 'L3 is connected to main feed', all set to 'L1', 'L2', and 'L3' respectively. A 'Back' button is on the bottom left and a 'Done' button is on the bottom right.

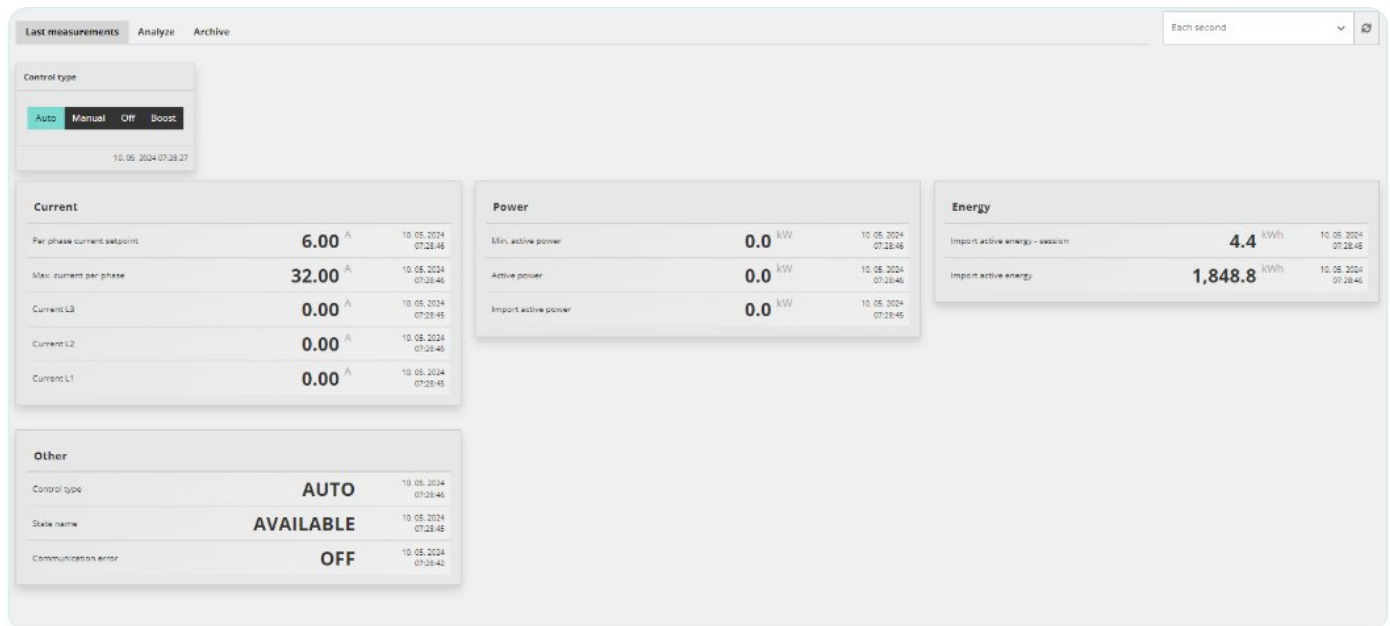
Advanced settings

When you are done, click **Finish** on the right side of the screen.

7 Check the readings

7.1 Last measurements

To check the device readings, go to **Device – Last Measurement** in the Reduxi Configurator.



Last measurements of the GARO charger

7.2 Monitor and control

When the device is added in the Reduxi Configurator, you can monitor it in the web app [Reduxi Cloud](#).

To reduce energy costs with dynamic prices and dynamic tariffs, define a strategy as described in [Strategies for Reduxi controller](#).

✓ Summary

Preparation (Points 1–2): Collect the GARO documents and the equipment: charger, Reduxi Controller, smartphone and a laptop or tablet.

GARO Entity (Points 3–4): Install the GARO Connect app, add the Entity charger and connect it to the same network as the Reduxi Controller.

Add to Reduxi (Points 5–6): Log in to the Reduxi Configurator, add an EV Charger with OCPP 1.6 - JSON, paste the OCPP server URL into the charger and test the communication.

Go live (Point 7): Check the readings under Device – Last Measurement, monitor in Reduxi Cloud and define a strategy.

→ Common issues

ISSUE	SOLUTION
Test shows "Unable to communicate with device" (Error 1)	The device identifier is not set or is incorrect. Enter the identifier obtained from the GARO charger (Point 6.2).
Test shows that no OCPP 1.6 device was found (Error 2)	Check that the charger and the Reduxi Controller are on the same network (Point 4) and that the OCPP server URL is entered in GarocsmsURL (Point 6.3).
The charger is moved or must connect to another network	Do a factory reset: hold the test button for 20 seconds. Then configure the charger again (Point 3.3).
Open configurator does not open or stays empty	The tunnel is not active yet. Wait about 30 seconds and check that the controller is online.
Login with admin is rejected	The password was changed during installation. Ask the installer. The Reduxi account password does not work here.
reduxi.local does not load	Your device is not in the same network as the controller. Use the IP address or the tunnel connection.
Communication test fails, device shows offline	Check reachability, IP address / port / unit ID, and that the protocol is enabled on the device.

→ Related articles

Matching guides from the Reduxi knowledge base:

 EV charger via OCPP 1.6J Generic guide for EV chargers that connect to the Reduxi Controller via OCPP 1.6J.	 Device setup guides All step-by-step guides for connecting devices to the Reduxi Controller
 List of supported devices All devices that work with the Reduxi Controller	 Strategies for the Reduxi Controller Energy manager and other strategies explained