



TerraConfig Mobile App

Quick User guide v1.0



—
Onboarding to TerraConfig
Onetime setup

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Get easily access
to TerraConfig
App



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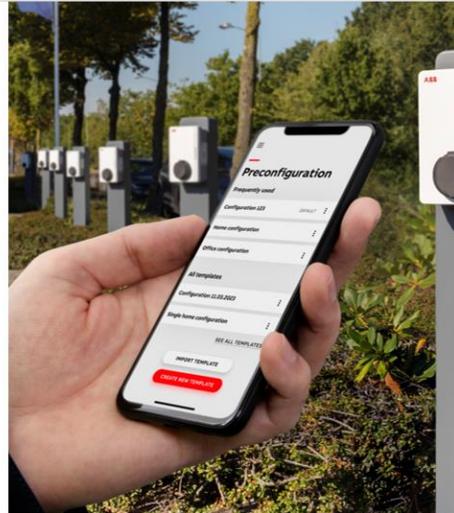
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3 Easily manage your installation related activities and save installation time



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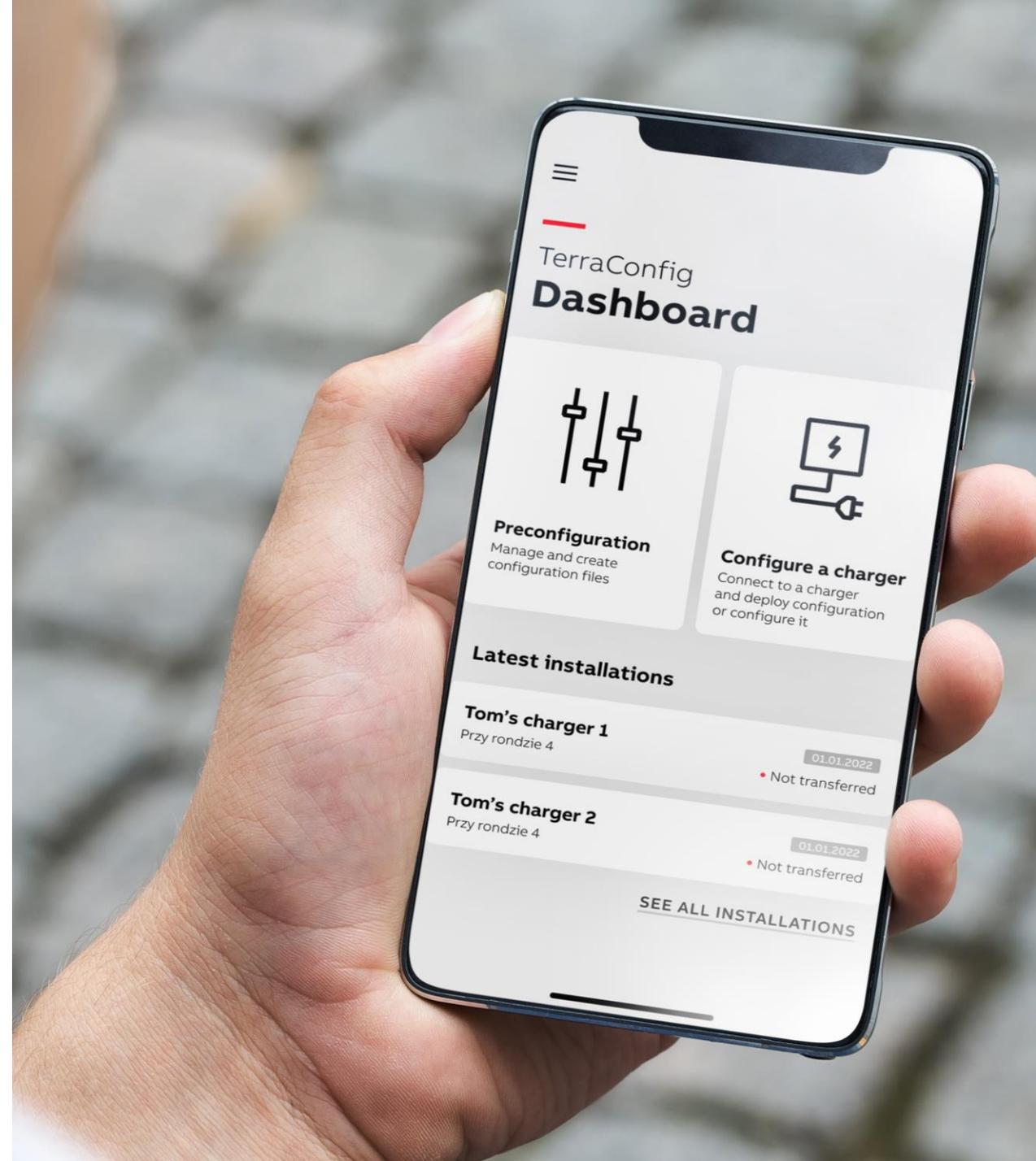
3.6. Commissioning by preconfiguration

Onboarding to TerraConfig

Onetime setup

1

Get easily access
to TerraConfig
App



Sign up

Easily create your account in TerraConfig. This will be helpful, if you are an individual installer and get started quickly to commission a charger.

As an Installer you need to provide consent that you're qualified to perform the installation and commission.

- Sign up process will guide you for account activation via an email
- If you are migrating from existing TerraConfig to this new mobile app, no need of sign up.

English >

Welcome to
TerraConfig

Create account

Username
Enter Username

Email Address
Enter Email Address

Password
Enter Password

At least 8 characters + 1 uppercase letter

Confirm Password
Confirm Password

Select Country
Select Country >

I have read and agree to [terms and conditions](#) and the [privacy policy](#)

SIGN UP

TerraConfig

Acknowledge

I hereby confirm that I am fully competent and qualified in accordance with the applicable laws, regulations standards to perform the electrical installation and configuration work (including any necessary diplomas, certificates, licenses or registration). I fully know and fully understand the TerraConfig app and the requirements for its safe installation and configuration of ABB AC Wallboxes and will comply with any applicable laws and regulations, the state of the art, as well as any instructions provided by ABB E-mobility BV, in particular in accordance with the operation and installation manual.

[View operation and installation manual](#)

Account setup via ABB

If your company has already an account with ABB in TerraConfig portal and you need to be part of it to access specific installation configuration, then please reach out to your company's TerraConfig portal administrator or our ABB local sales representative.

- After your account creation, you will receive an email to log into your account
- If you are migrating from existing TerraConfig to this new mobile app, no need to create an account



WELCOME TO TERRA AC

TerraConfig APP
Account Activation

....

Your account details are:

Username: xxx..

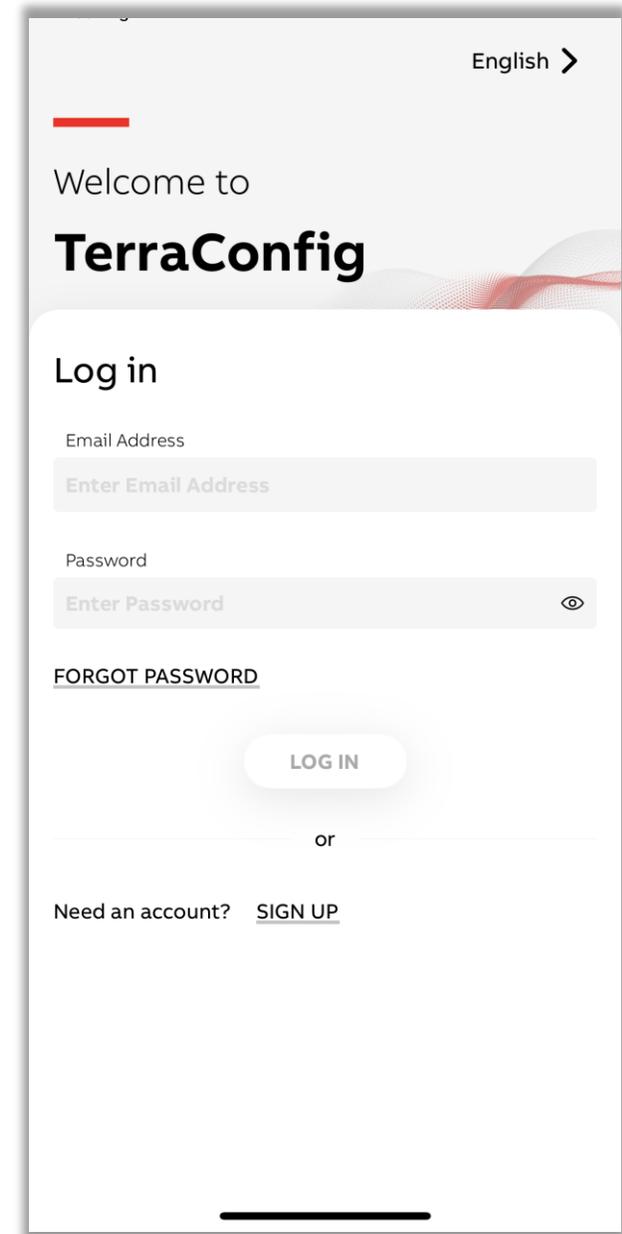
Password: yyy..

*for example purpose

Log in

Log in with your account credentials.

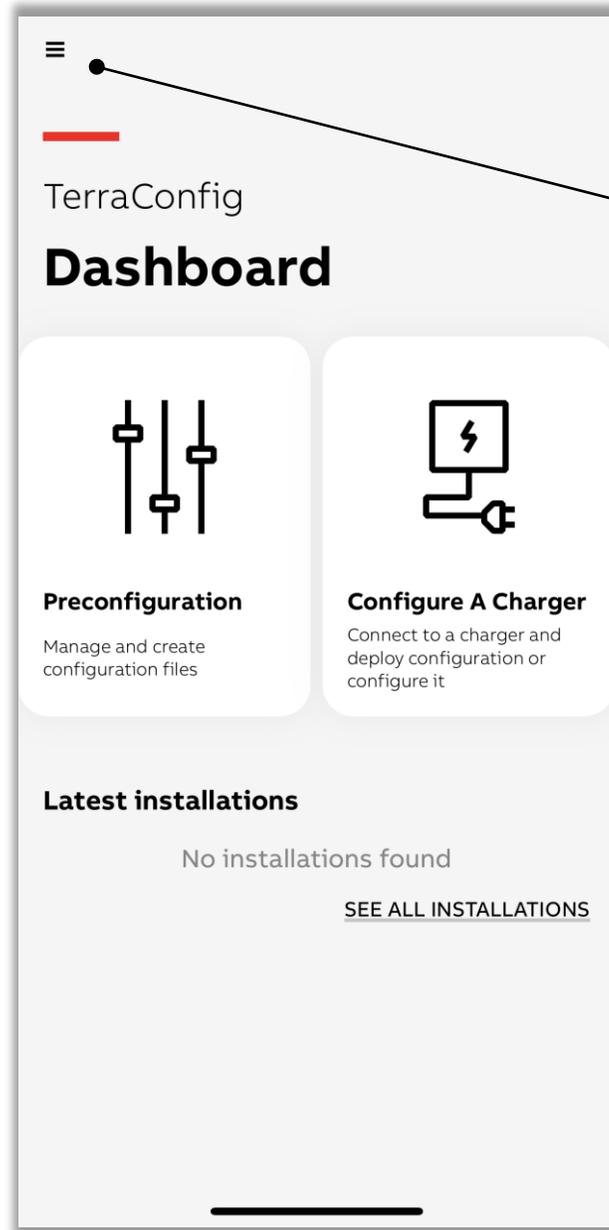
If you are migrating from existing TerraConfig to this new mobile app, you can easily log in with same credentials.



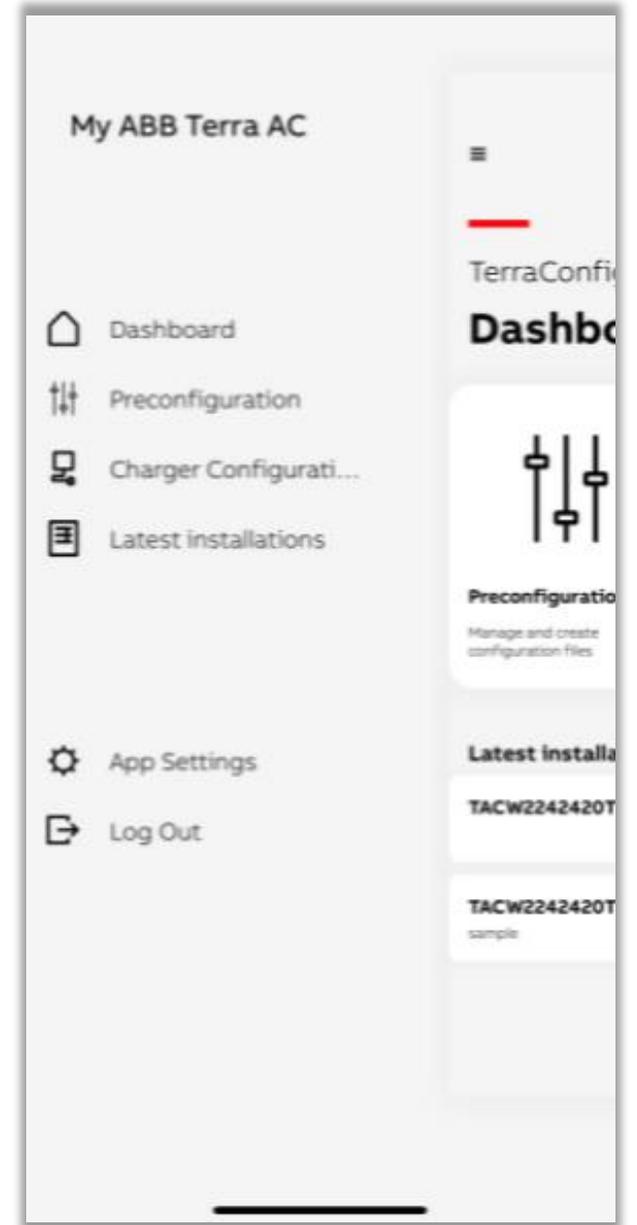
The screenshot shows the login interface of the TerraConfig mobile app. At the top right, there is a language selector set to "English" with a right-pointing chevron. Below this is a red horizontal bar, followed by the text "Welcome to" and the app name "TerraConfig" in a large, bold font. The main content area is a white card with the title "Log in". It contains two input fields: "Email Address" with a placeholder "Enter Email Address" and "Password" with a placeholder "Enter Password" and a toggle icon (an eye) on the right. Below the password field is a link for "FORGOT PASSWORD". A "LOG IN" button is centered below the links. A horizontal line with the word "or" in the center separates the login section from the sign-up section. The sign-up section includes the text "Need an account?" followed by a "SIGN UP" link. A black horizontal bar is visible at the very bottom of the screen, likely representing the mobile home indicator.

App menu overview

Navigations



Menu



App personalization

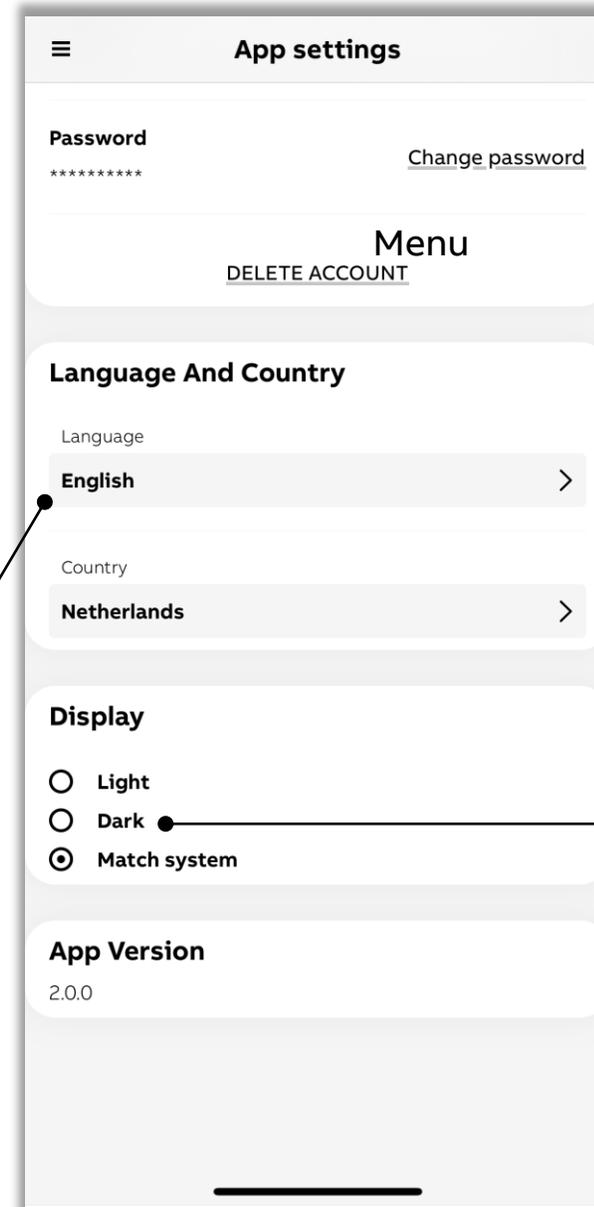
App account related details can be viewed and managed.

This can be accessed from Menu -> App settings

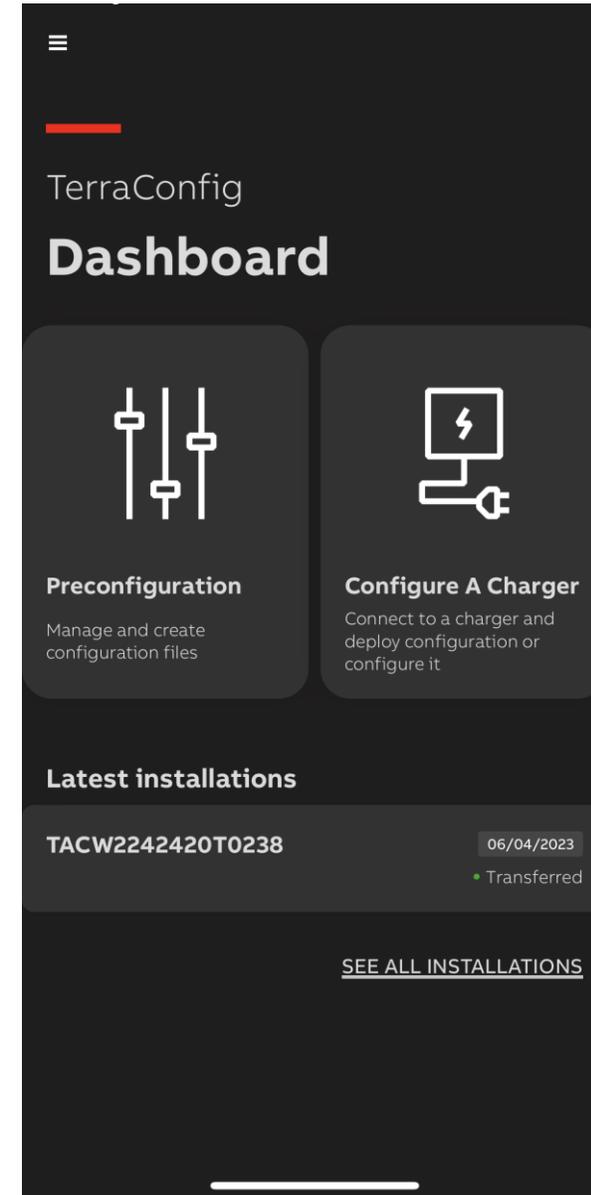
App supports many languages

Croatian, Czech, Danish, Dutch, Estonian, Finnish, French, Hebrew, Hungarian, German, Greek, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Slovak, Slovenian, Spanish, Swedish and Turkish

Choose your preferred language



Sample of dark mode

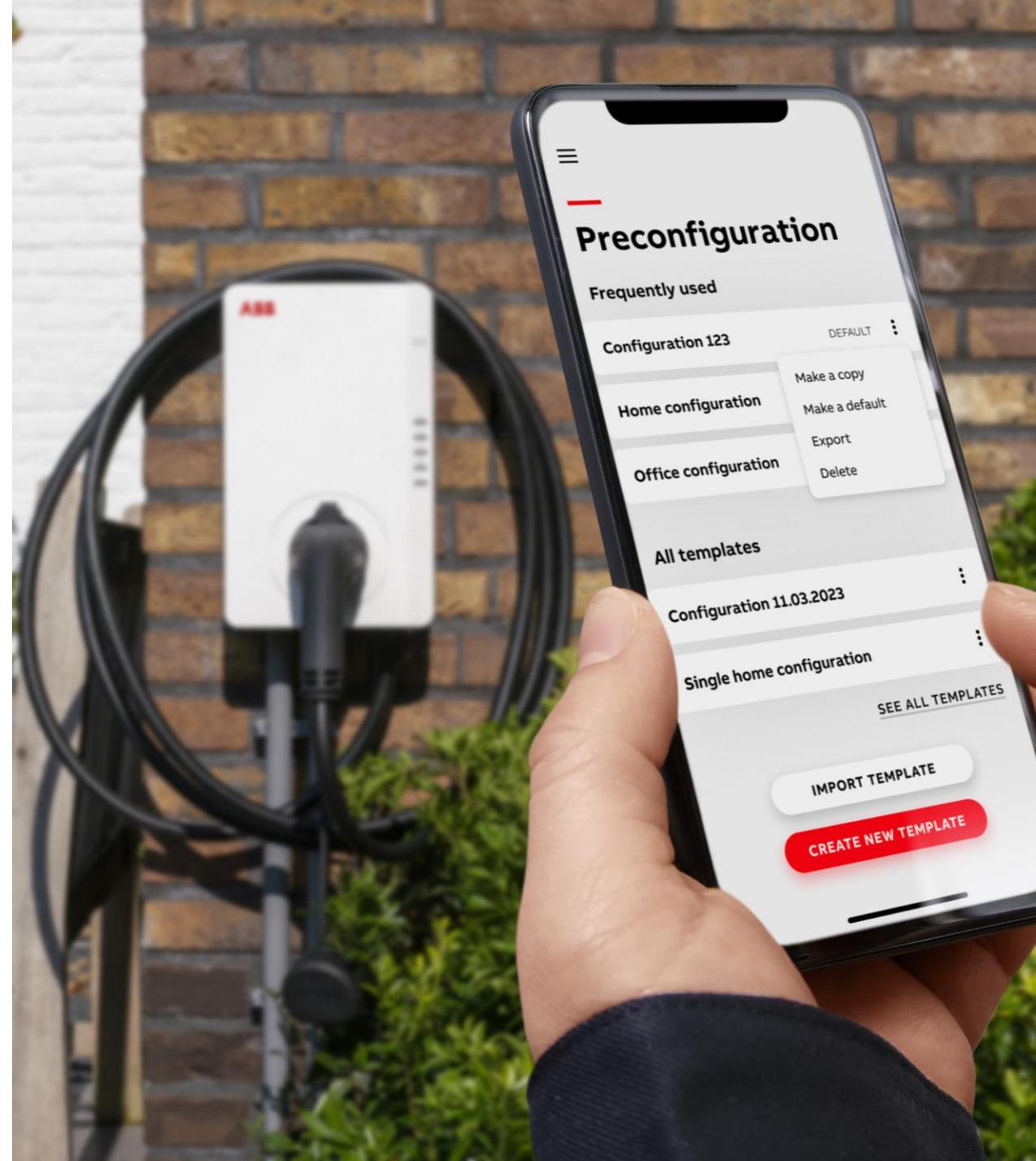


Commission a charger

Basic essential operation

2

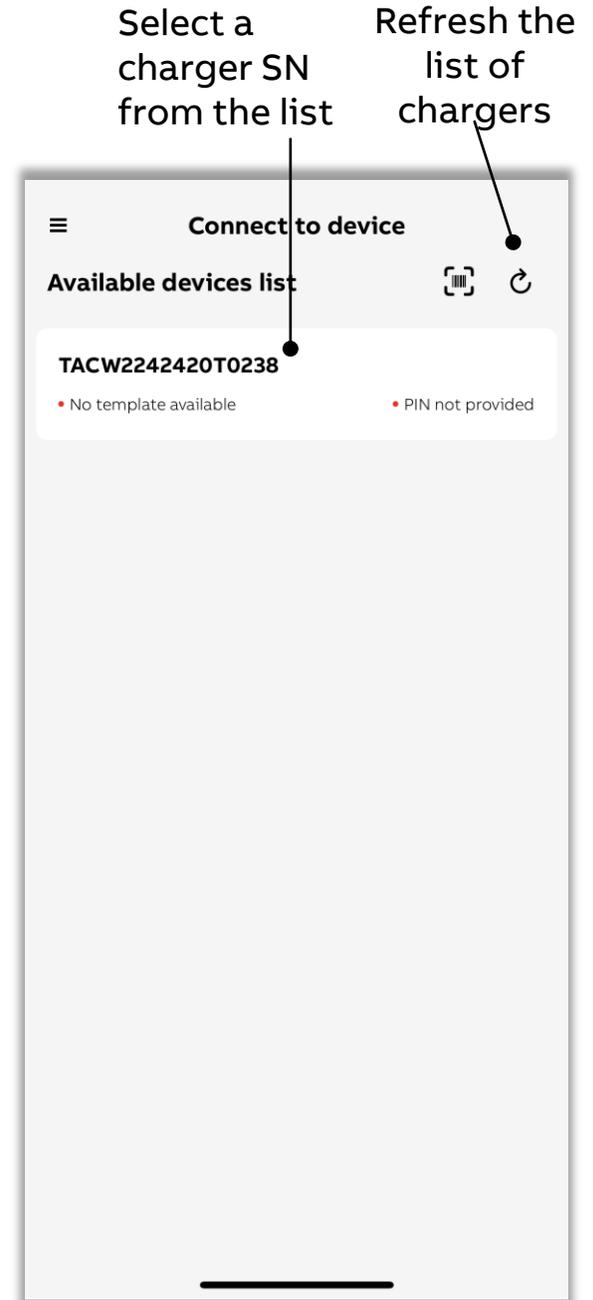
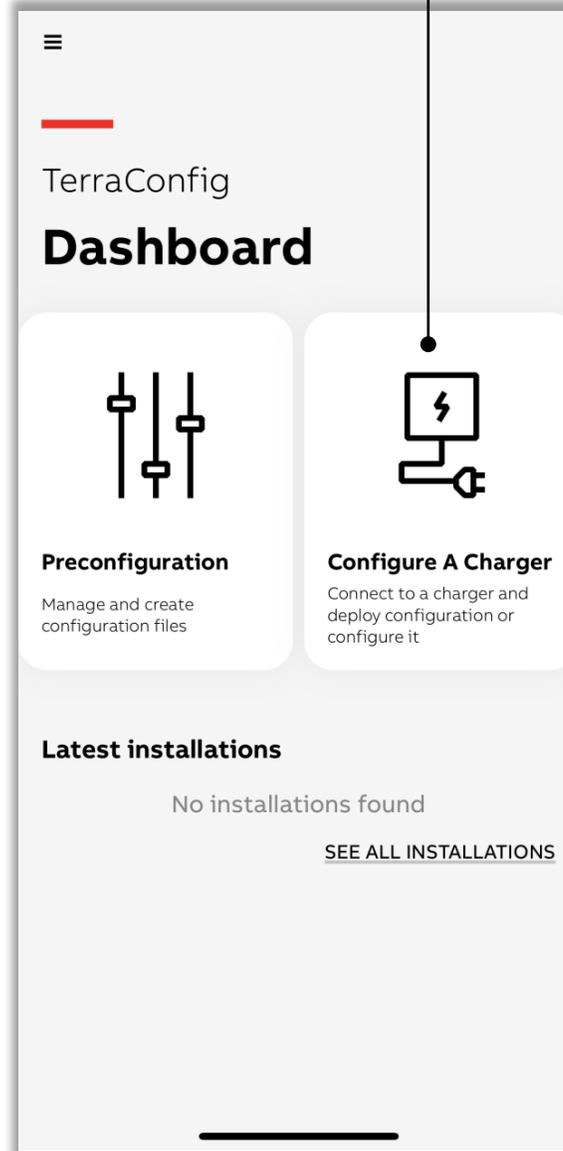
TerraConfig App guides you to successfully configure a charger



Select a charger

After the electrical installation of a charger, select a charger to configure it.

- Select configure a charger in the dashboard
- Turn on your phone Bluetooth since this is needed for app to communicate with charger during commissioning
- Select a charger from the available list

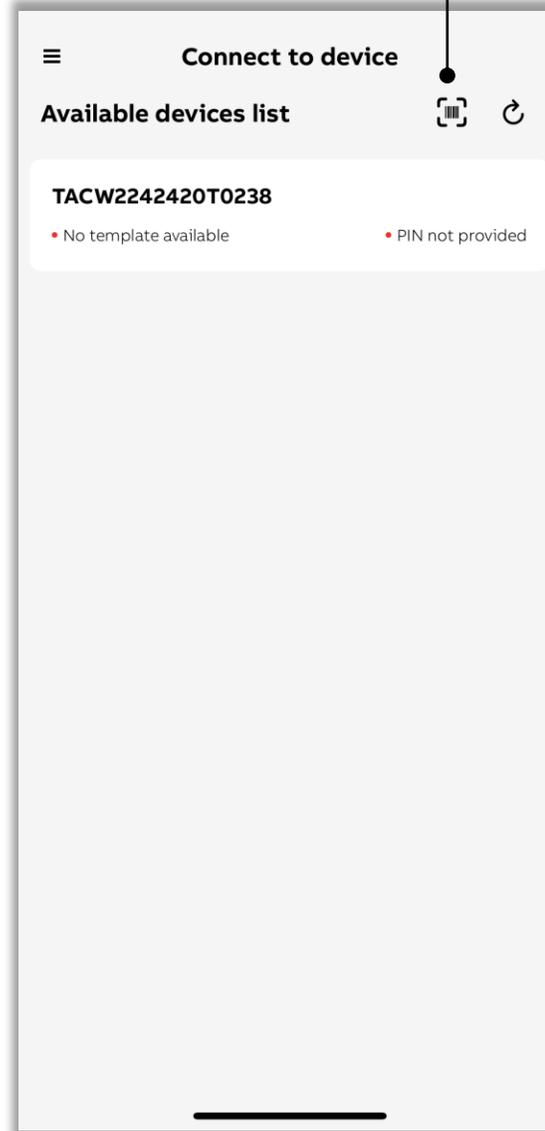


Select a charger

Alternatively, you can also select a charger by scanning the SN bar code of a charger

- While scanning, please make sure you are scanning the charger SN bar code (for example its start with TAC and this may vary based on product variants)

Click here
to scan SN



Connect a charger

After selecting a charger to connect, enter the PIN.

Further, you can select “start from scratch” and confirm to proceed next step.

- Phone/mobile app needs to have internet connection for PIN validation
- While moving to next step, app will indicate that configuration setting will be configured to charger in one shot during confirm configuration

For first time installation configuration

Cancel **Enter PIN**

TACW2242420T0238

Serial Number

TACW2242420T0238

PIN

PIN code will be stored only on this device. It cannot be exported.
You can find the PIN code on the brochure in the box or in the transfer email sent by your installer

OK

< Back **Choose Configuration**

TACW2242420T0238

Choose the configuration available for the charger with a matching serial number or a default one.

Start from scratch ✓

[EDIT CURRENT CONFIGURATION](#)

CONFIRM

Configure settings

Product details, logs

Bluetooth needs to be at connected state (i.e.) green

After pushing/confirming the configuration, connection symbol will show green according to the configuration

Options to reuse the installation configuration setting to apply with different chargers

Internal charging limit (i.e.) absolute charging capacity, beyond this end user cannot increase charging current

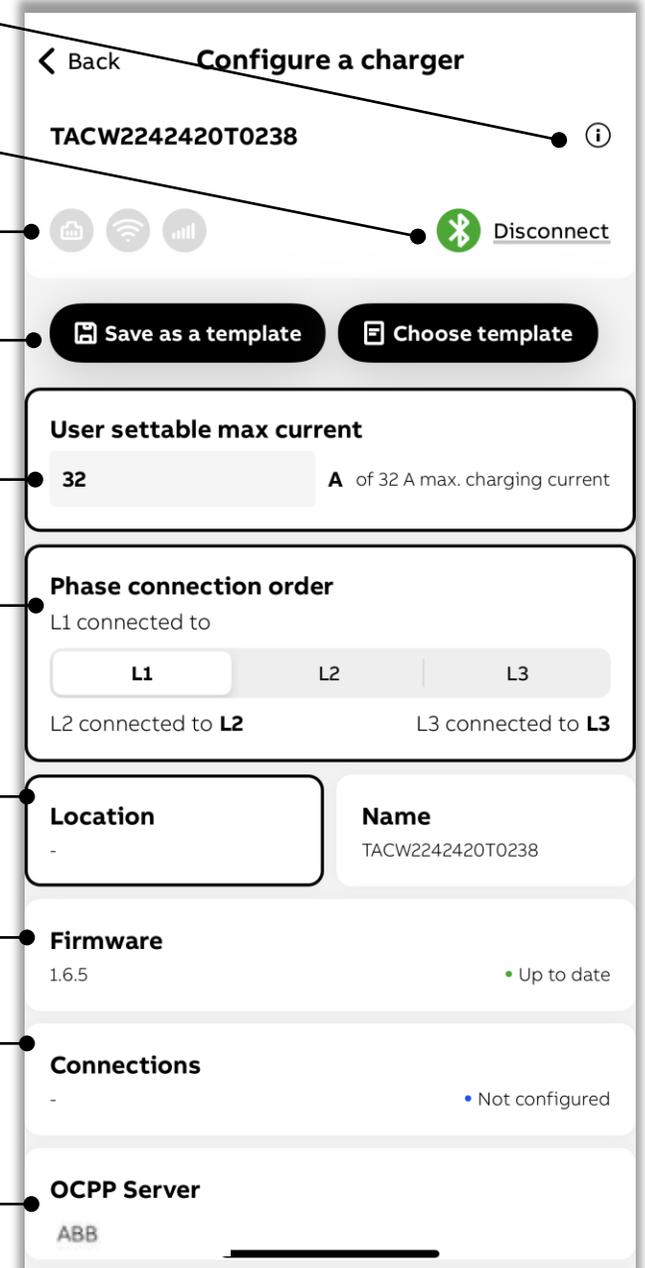
Phase rotation information

Location of the charger

To update firmware version

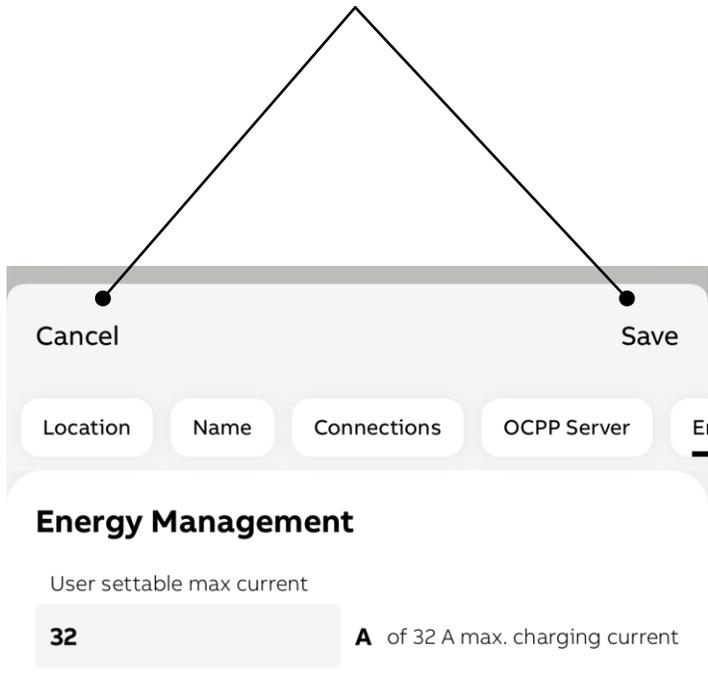
Internet connectivity of a charger

Backoffice or OCPP server connection

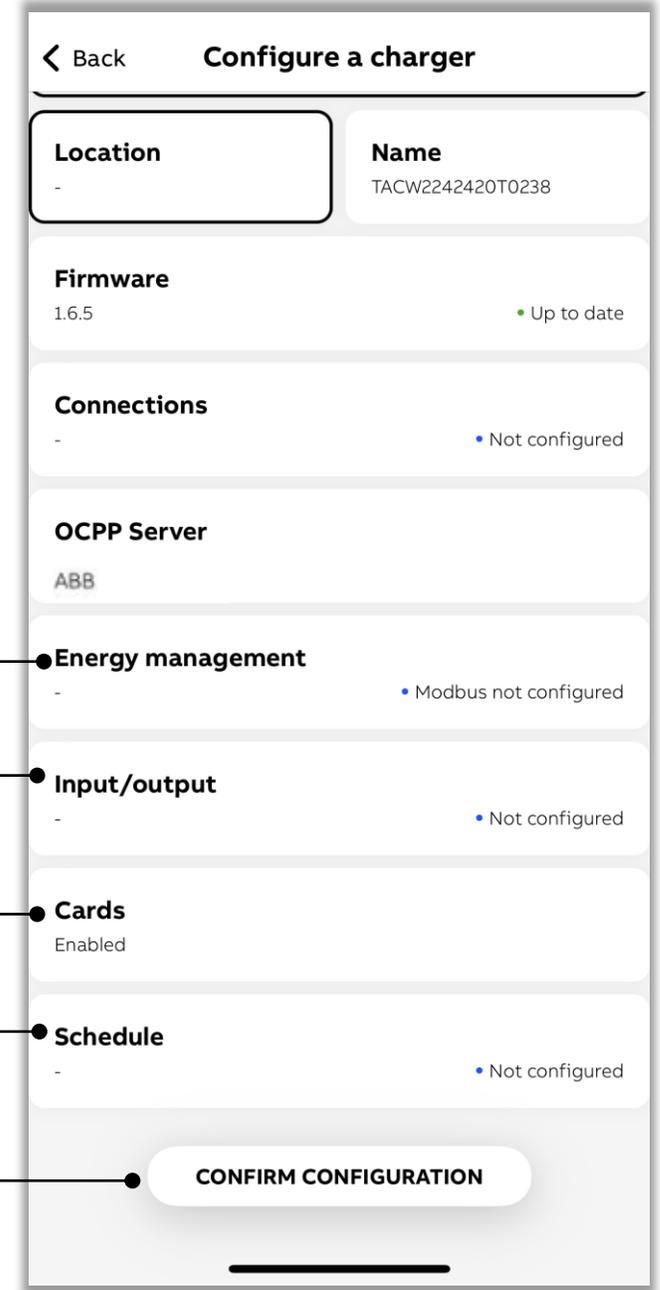


Configure settings

In general, for any of the settings there will be Save/Cancel option while entering the settings. Note that changes will only be done after finalizing the complete process, not after each Save.



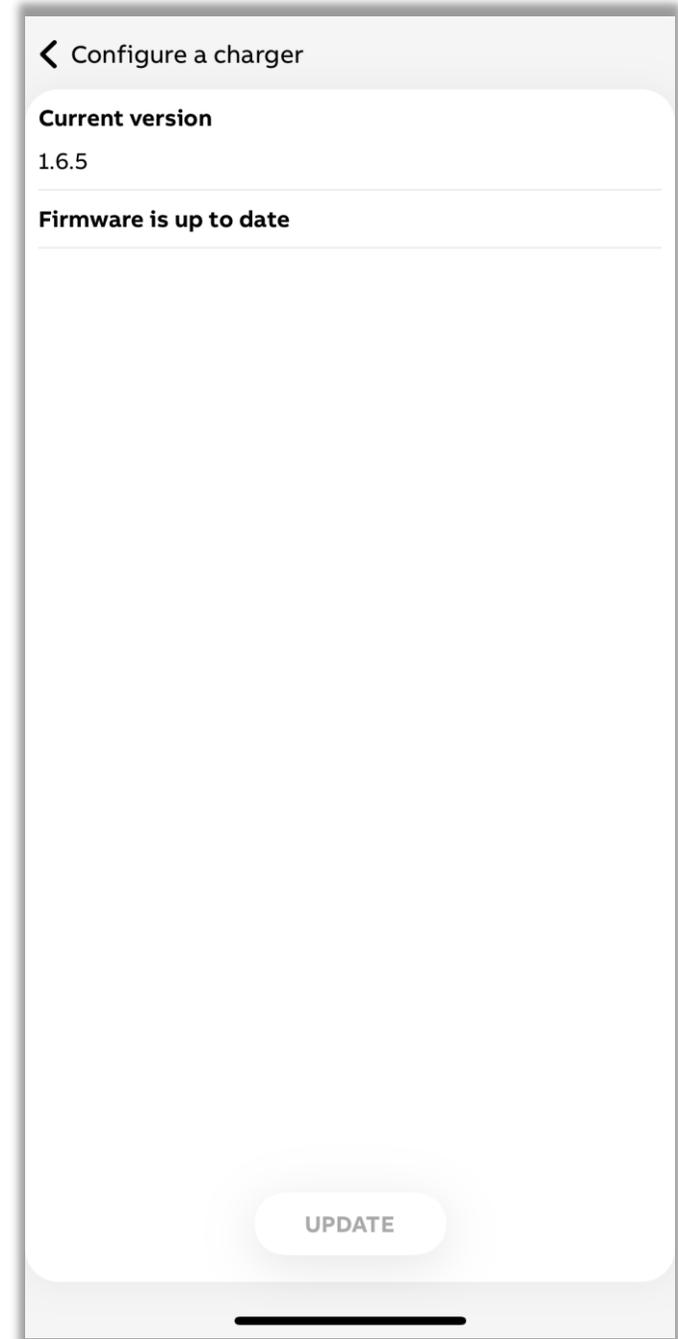
- Load management topology and smart meter/Modbus related settings
- Dry contacts/IO for extended use case
- To control RFID charging card
- Country specific charging schedule
- All settings will be pushed one-shot to charger



Firmware update

Check firmware version. Always update Firmware to the latest version.

Currently, firmware update is possible only via Bluetooth with charger during commissioning and app will guide you to download the right firmware packages according to the product variant.

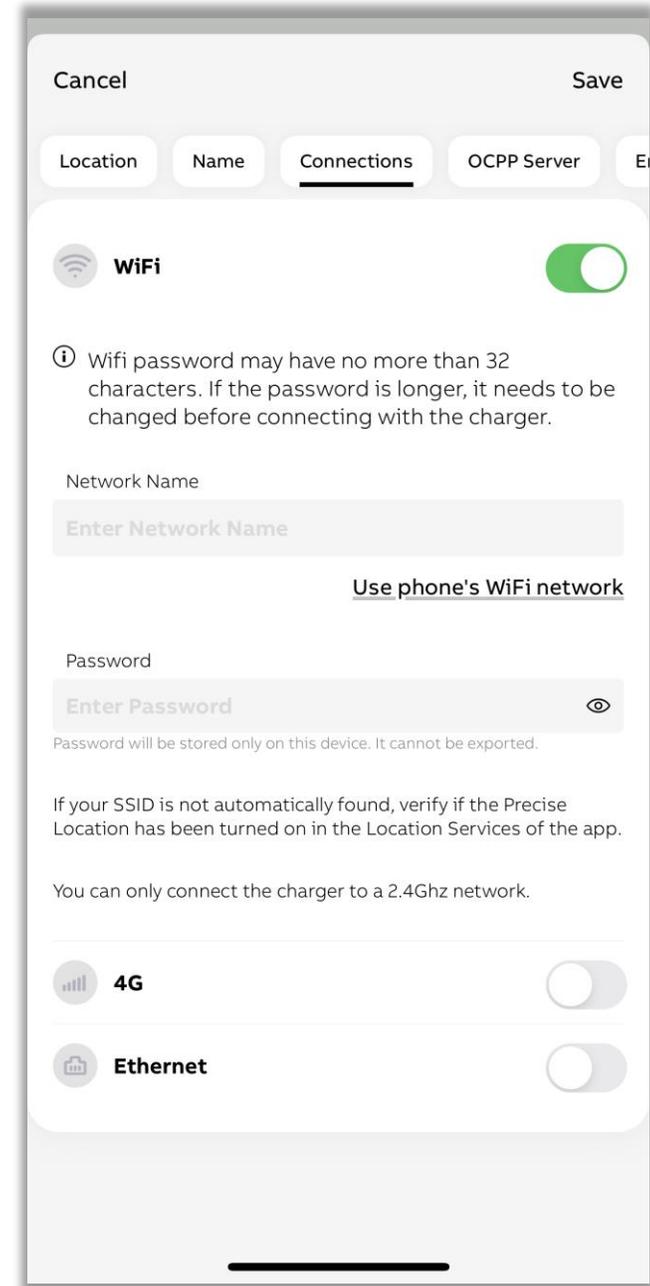


Network connection

Internet connection is optional for charger and this needs to be configured according to customer preferences.

App guides to configure WiFi, 4G, LAN/Ethernet.

- Terra AC wallbox can operate with 2.4GHz Wi-Fi network
- Location service is not a must to establish successful connection

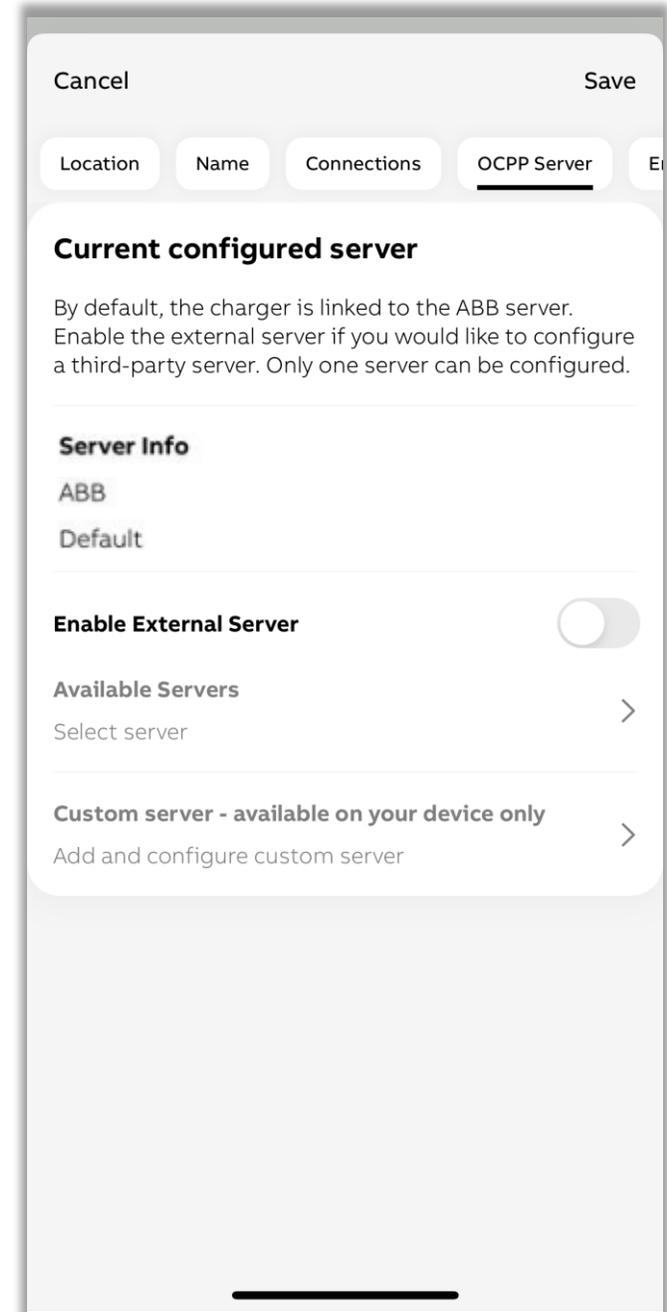


OCPP server

Default – ABB server

Terra AC wallbox by default configured to connect with ABB server.

This enables end user to control charger remotely via ChargerSync mobile app.



OCPP server

External Backoffice

New OCPP URL:

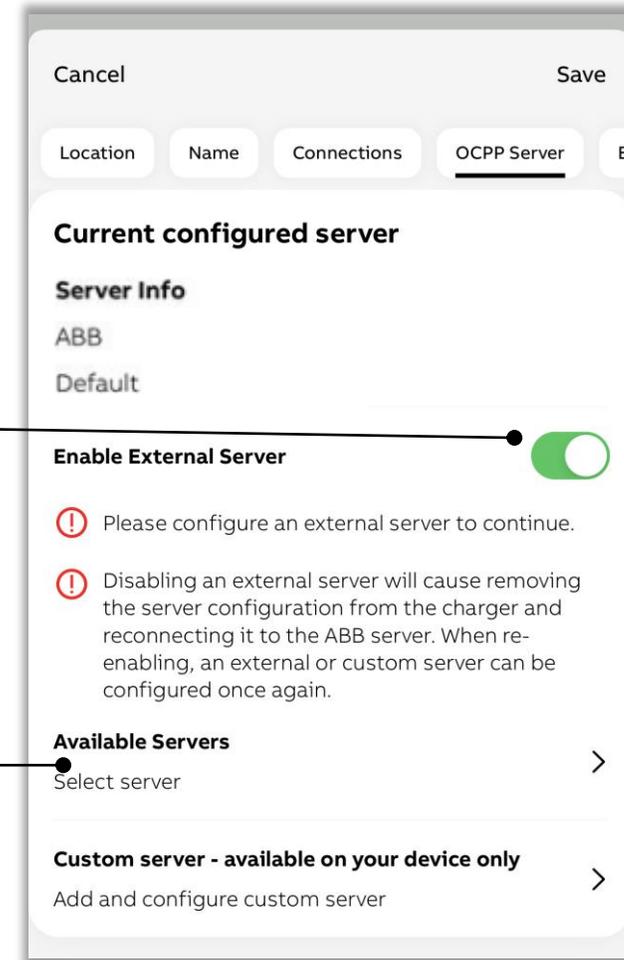
- If an OCPP URL needs to become visible for installers in the TerraConfig mobile app, firstly contact ABB local sales representative for the onboarding process to ensure that the Terra AC wallbox charger is compatible with the OCPP backend.
- Backend providers could decide with the support of ABB (in TerraConfig portal) whether to make OCPP URL visible for all self-signup users (part of Self Registered Company) or themselves for a specific company users using TerraConfig portal.

Existing OCPP URL:

- If your company has already an existing OCPP URL/account in the TerraConfig portal, then please reach out to your company's TerraConfig portal administrator. If your TerraConfig mobile account is added by your company, then you will be able to see the OCPP profile automatically.

Select here to configure external OCPP server

Select here to see the list of servers

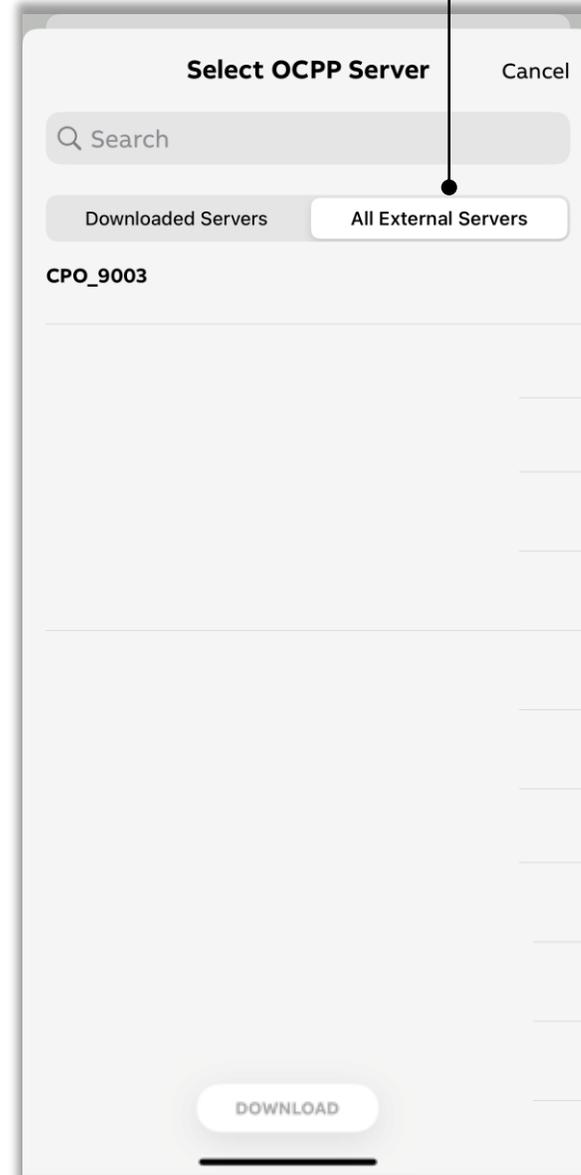


OCPP server

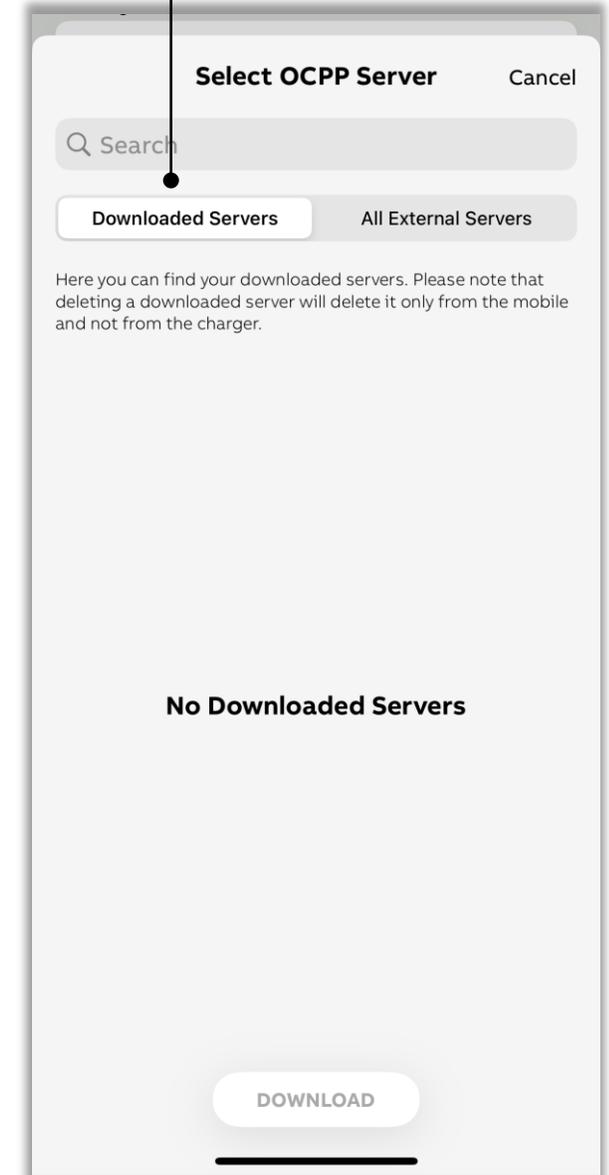
External Backoffice

- Go to “All External Servers”
- Select the server and “Download”
- Go to “Downloaded Servers”, select the URL and “Configure”
- App supports both unsecured(ws) and secured(wss) OCPP URL which could be preconfigured by a company/CPO
- Terra AC wall box supports OCPP1.6J protocol

Download here from the list of servers



select to configure from the downloaded

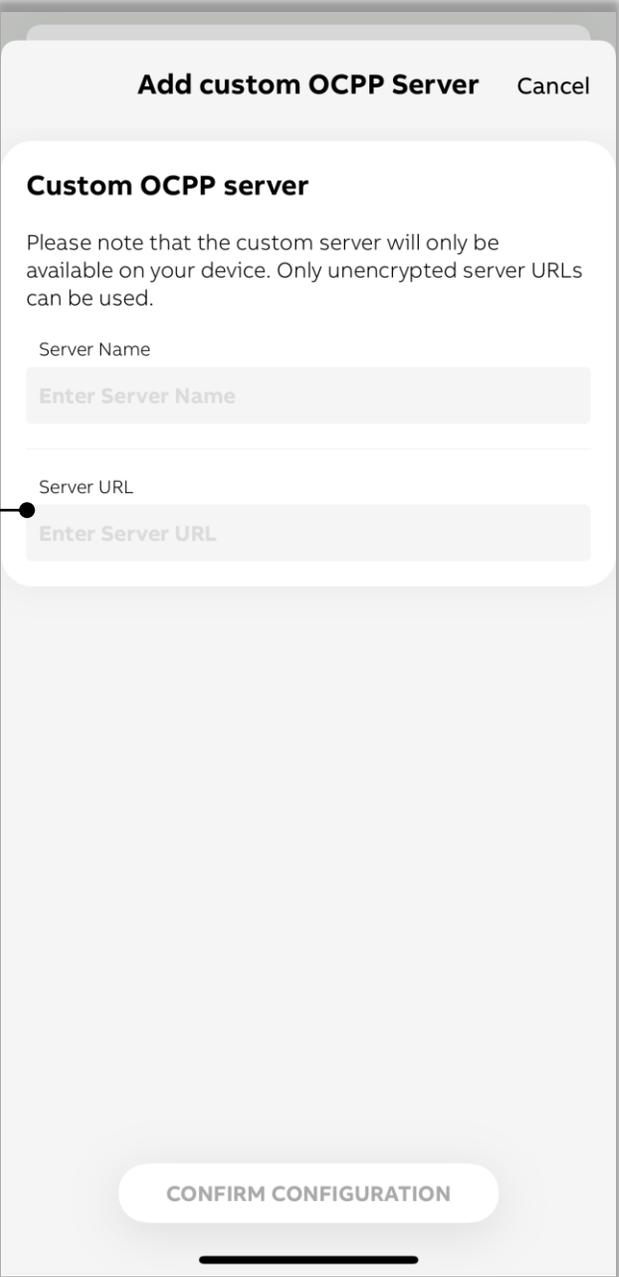


OCPP server

Custom

You can also directly type in and configure the unsecured OCPP server URL to connect a charger with any OCPP1.6J protocol backend.

ws://example.com:port
number/endpoint



The screenshot shows a mobile application interface for adding a custom OCPP server. At the top, there is a title bar with the text "Add custom OCPP Server" and a "Cancel" button. Below the title bar, the main content area is titled "Custom OCPP server". A warning message states: "Please note that the custom server will only be available on your device. Only unencrypted server URLs can be used." There are two input fields: "Server Name" with a placeholder "Enter Server Name" and "Server URL" with a placeholder "Enter Server URL". A line from the text "ws://example.com:port number/endpoint" points to the "Server URL" input field. At the bottom of the screen, there is a button labeled "CONFIRM CONFIGURATION".

Energy Management

Electrical settings

Configure the electrical related settings according to site electrical system connection.

Internal charging limit
(i.e.) absolute charging
capacity, beyond this
end user cannot increase
charging current

Phase rotation
information

Electrical earthing
system information

Smart meter connection
with charger

Cancel Save

Location Name Connections OCPP Server E

Energy Management

User settable max current

32 A of 32 A max. charging current

Phase Connection Order

Please align the charger with the phase configuration of the grid. After connecting with the charger, the setting will change to a single phase if applicable.

L1 connected to

L1 | L2 | **L3**

L2 connected to **L1** L3 connected to **L2**

Electrical Grid Network Type

TT, TN | Split phase | **IT**

Modbus

Use Modbus to connect the charger to a smart meter or building manager

Energy Management

Smart meter setting

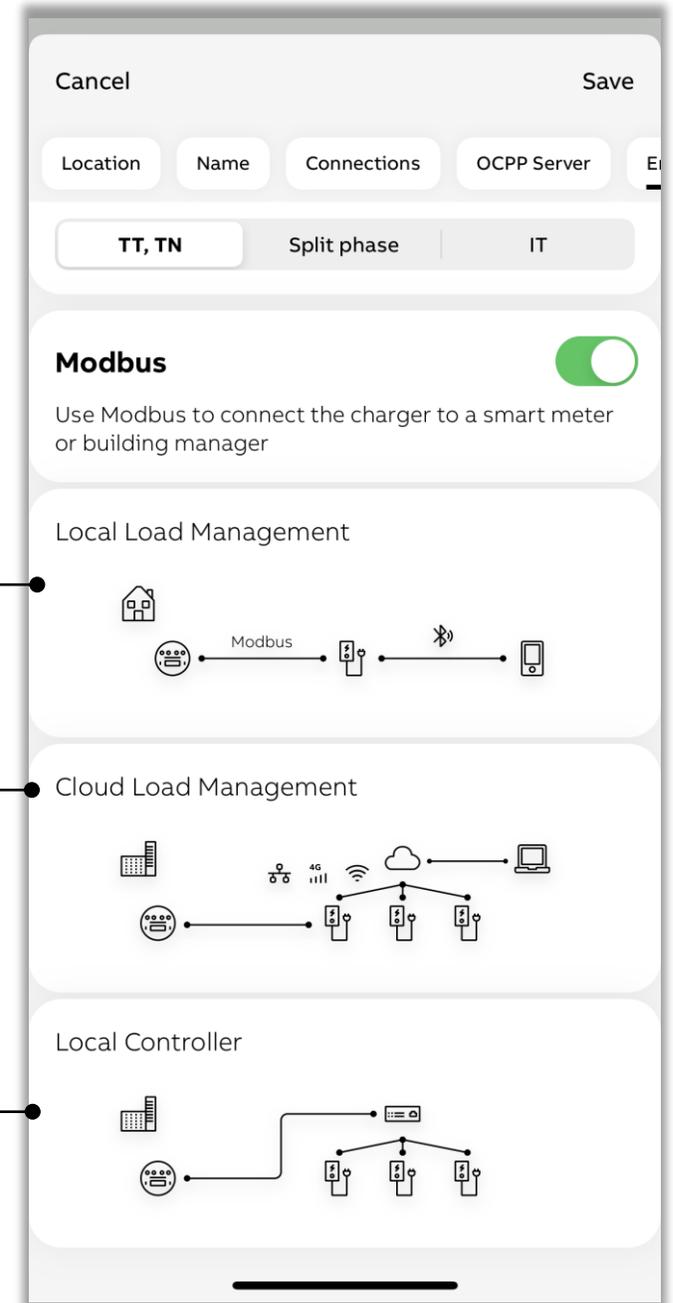
Smart meter is connected via Modbus and interfaced with charger for load management.

There are different topology of load management possible which needs to be selected according to the site installation.

Smart meter is directly connected with a charger

Multiple chargers are connected to ABB backend, in that smart meter is connected to one of a charger

Chargers are connected via Modbus TCP or RTU to an external controlling system



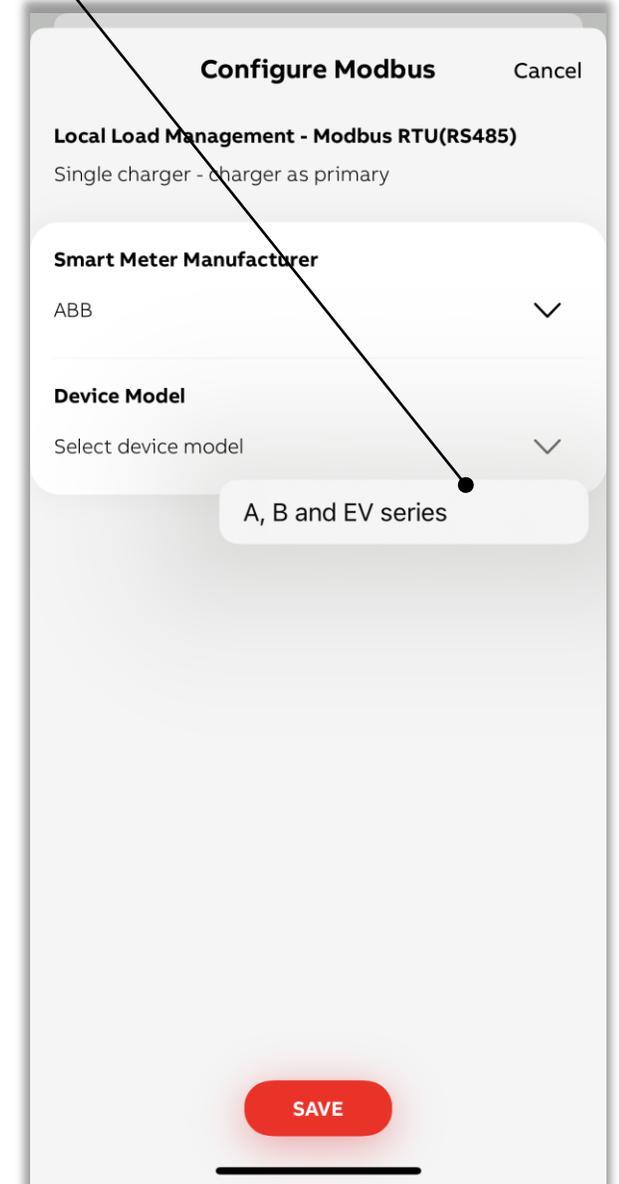
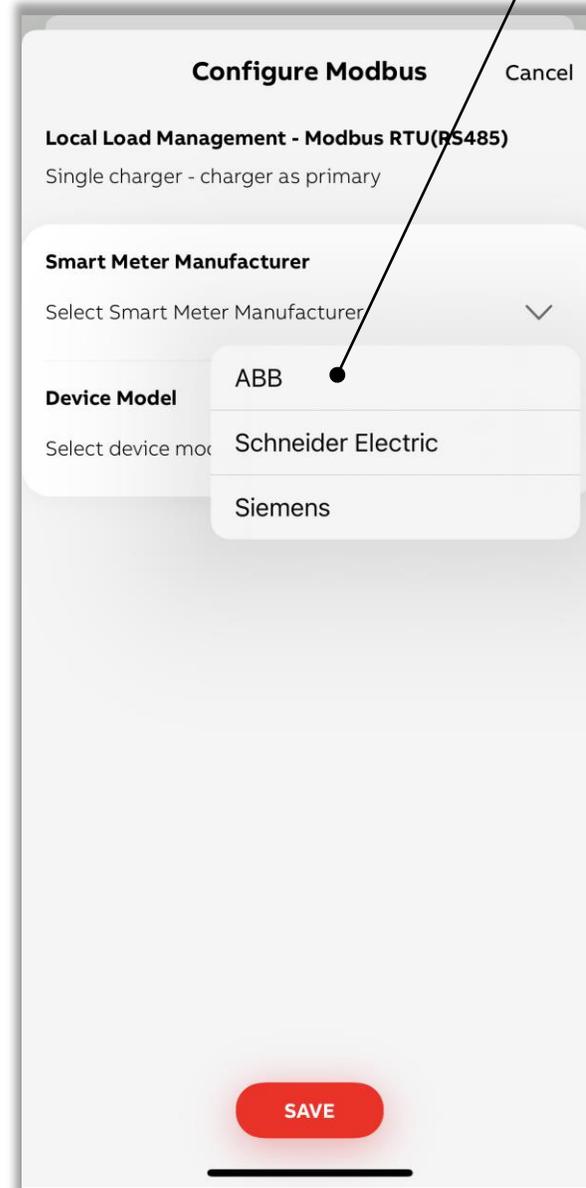
Energy Management

Supported smart meter

Charger compatible to connect below smart meter via Modbus RTU/RS485.

Meter Manufacturer	Model number
ABB	B21 xx2-xxx
	EV1 xx2-xxx
	A41 xx2-xxx
	B23 xx2-xxx
	EV3 xx2-xxx
	A43-xx2-xxx
	A42 xx2-xxx
B24 xx2-xxx	
A44-xx2-xxx	
Siemens	PAC3100
Schneider	iEM3000 Series
	PM5300 series

Example of selecting ABB meter

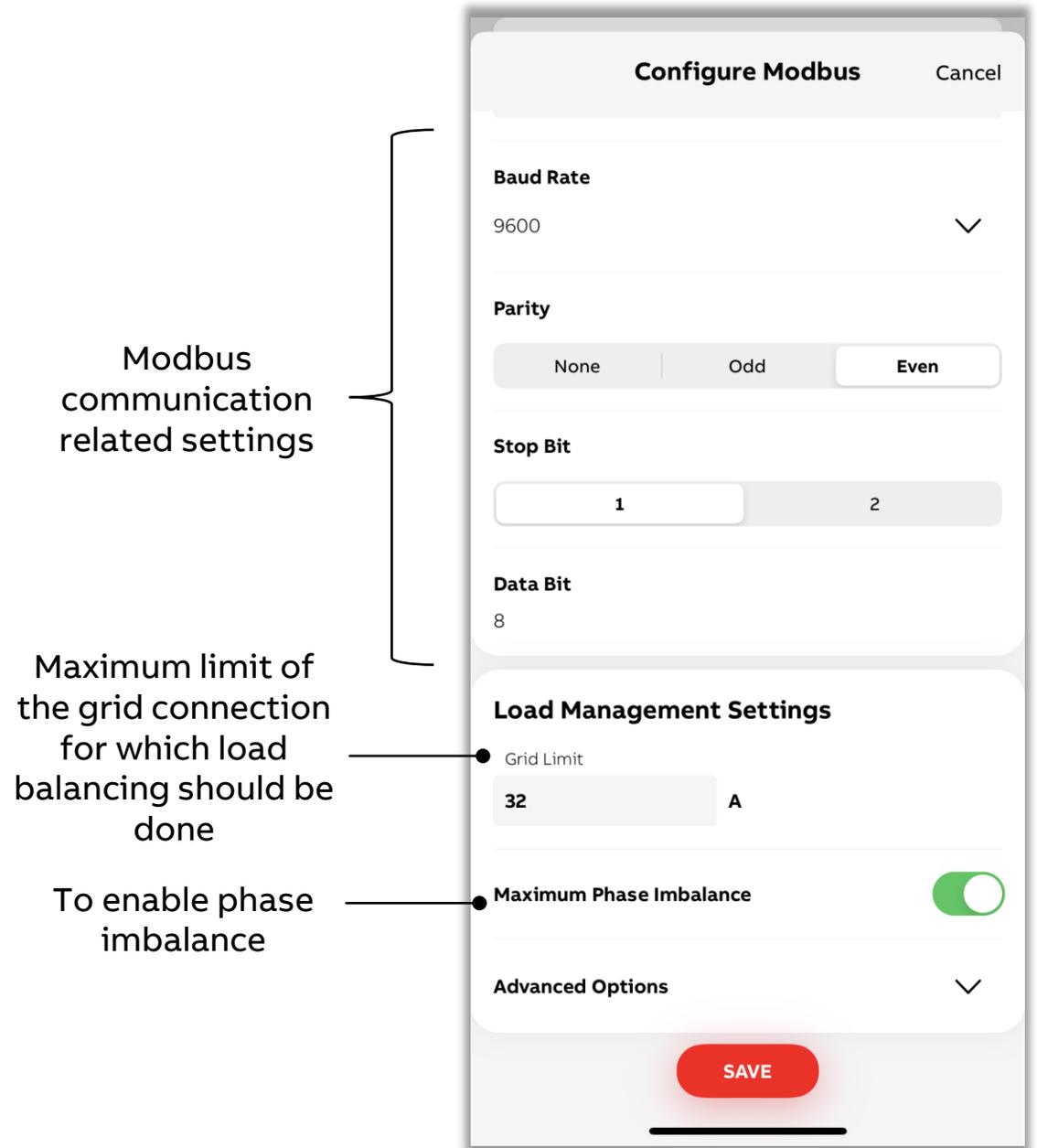


Energy Management

Modbus settings

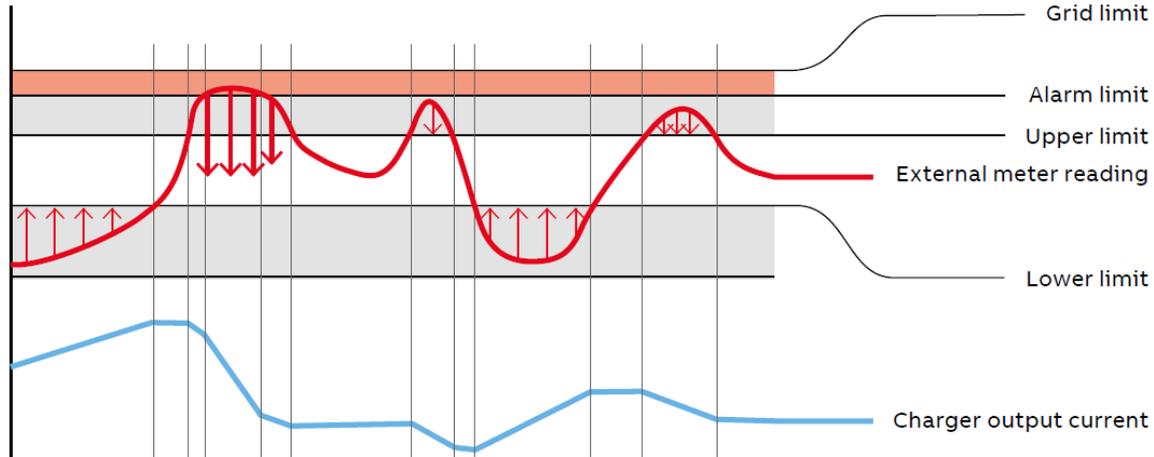
After selecting a meter to be connected, app automatically configure default values required to establish successful communication with meter.

Also, it possible to adjust values for that please refer to meter manual and select the preferred settings (e.g.) baud rate.



Energy Management

Local load management settings



- Advance load management settings are optional based on preference. If not configured charger will work based on default value
- In general, wait time is for the purpose of algorithm to check the values obtained from external meter against the defined limit (i.e.) validate and confirming

Maximum delta (in Ampere) between two separate phases that is to be pursued

Limit after which charger will react by **decreasing** the power output by a **significant** amount

Limit after which charger will react by **decreasing** the power output by a **small** amount

Limit after which charger will react by **increasing** the power output by a **small** amount

Charger output limit when there is **no network Connection/meter connection lost**

Configure Modbus
Cancel

Advanced Options ▼

Max. Phase Imbalance A

Alarm Limit Wait Time

s

Change Amount A

Upper Limit Wait Time

s

Change Amount A

Lower Limit Wait Time

s

Change Amount A

Fallback Limit Fallback Time

s

SAVE

Energy Management

Cloud load management

App supports to configure only the meter related configuration which is connected to a charger.

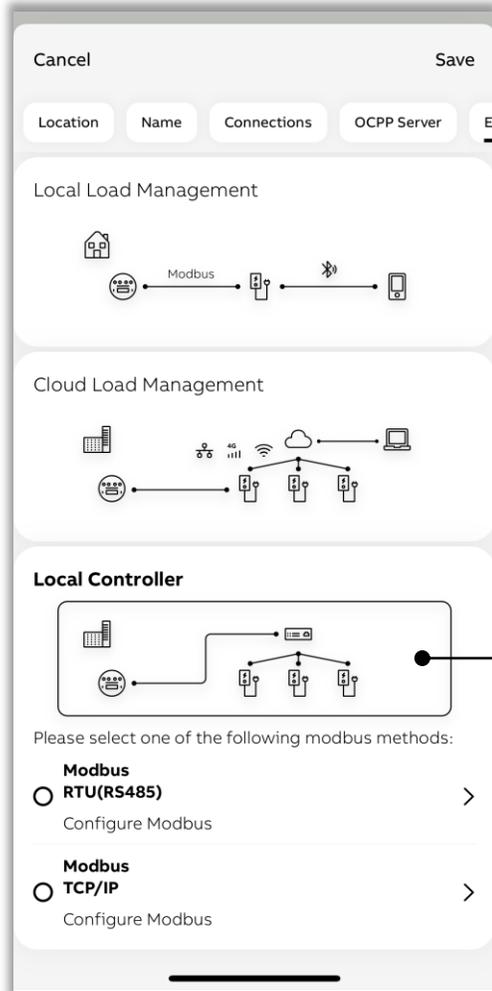
Other cloud load management budget needs to be configured and managed in the ChargerSync portal.

Select the topology, further meter to be connected and its modbus settings

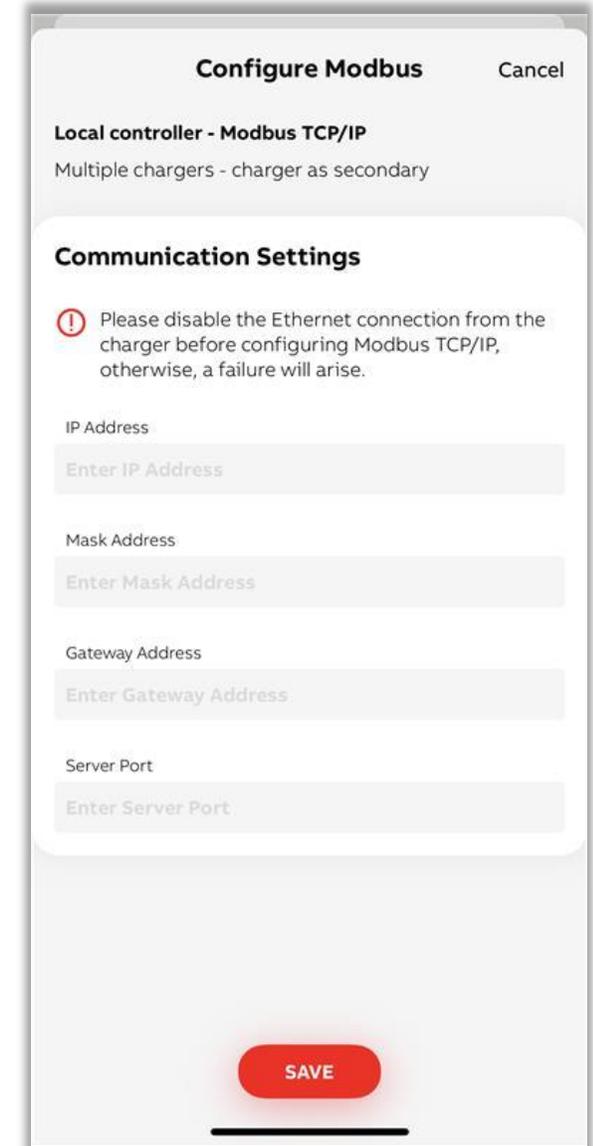
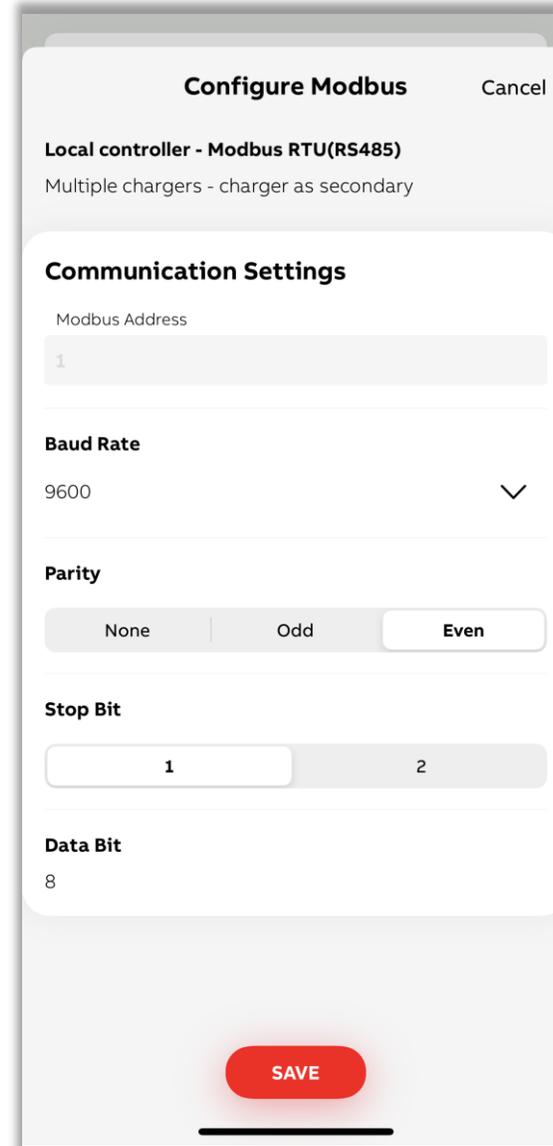
The screenshot shows two configuration options for load management. The top section, 'Local Load Management', features a diagram of a house connected to a meter, which is then connected to a charger via Modbus. The bottom section, 'Cloud Load Management', features a diagram of a building connected to a meter, which is connected to a cloud server, which in turn connects to multiple chargers. Below the diagrams, there are radio button options for 'Modbus RTU(RS485)' and 'Modbus TCP/IP', with a right-pointing arrow next to the first option.

The screenshot shows the 'Configure Modbus' settings screen. It includes a 'Smart Meter Manufacturer' dropdown menu set to 'ABB', a 'Device Model' dropdown menu set to 'A, B and EV series', and a 'Communication Settings' section. The 'Modbus Address' is set to '1'. The 'Baud Rate' is set to '9600'. The 'Parity' is set to 'Even' (with 'None' and 'Odd' also visible). The 'Stop Bit' is set to '1' (with '2' also visible). The 'Data Bit' is set to '8'. A red 'SAVE' button is located at the bottom right.

Energy Management via local controller



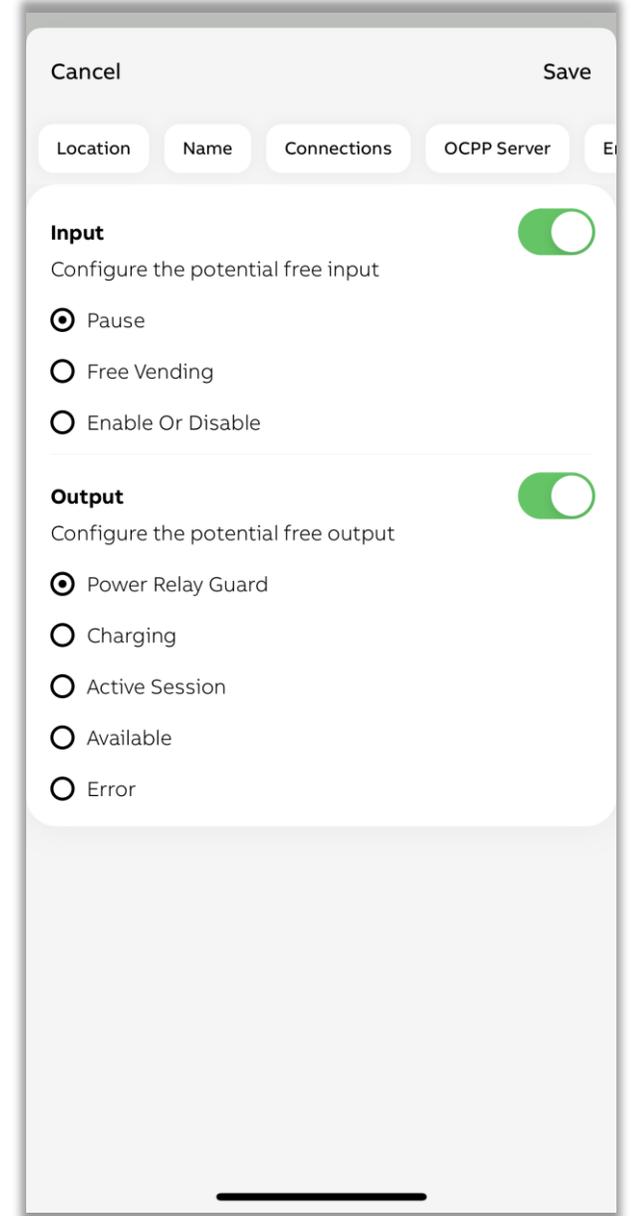
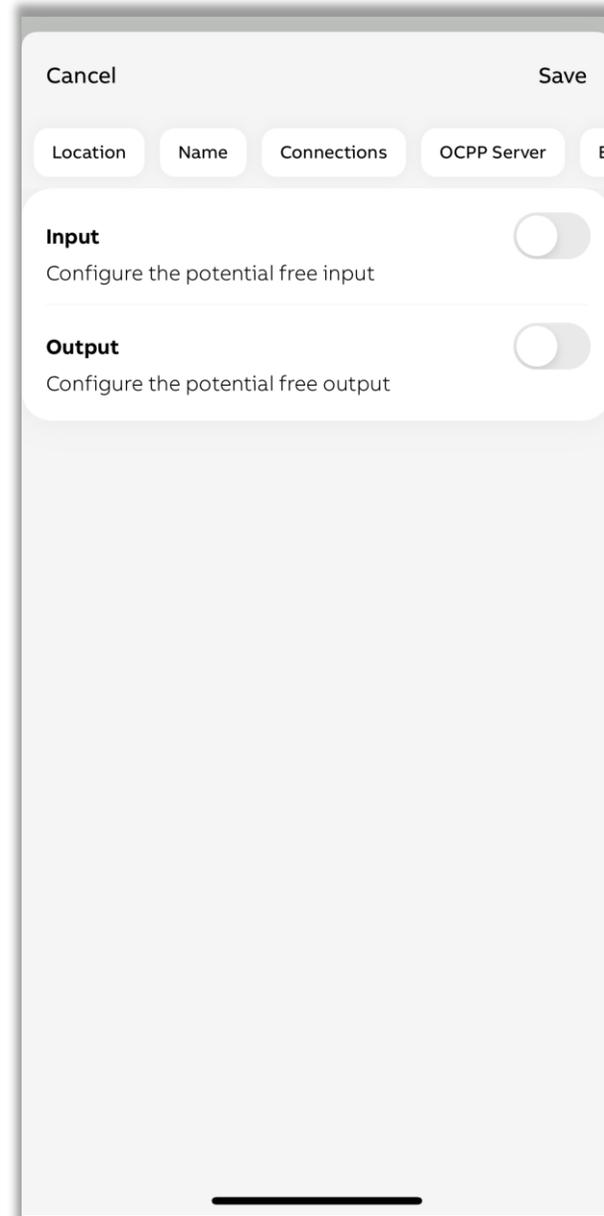
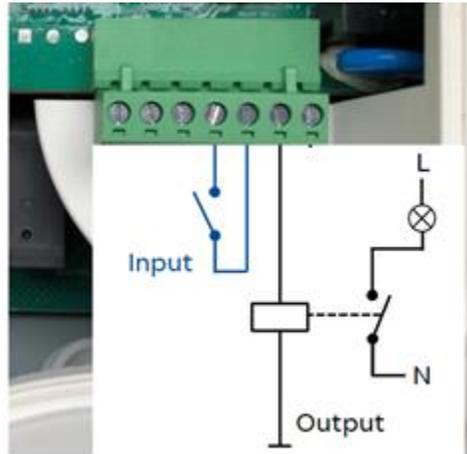
Select local controller to
configure the charger to be
controlled via external system
based on Modbus RTU or TCP



Input/Output

Dry contacts

You can configure external input to control the charger or control external output.

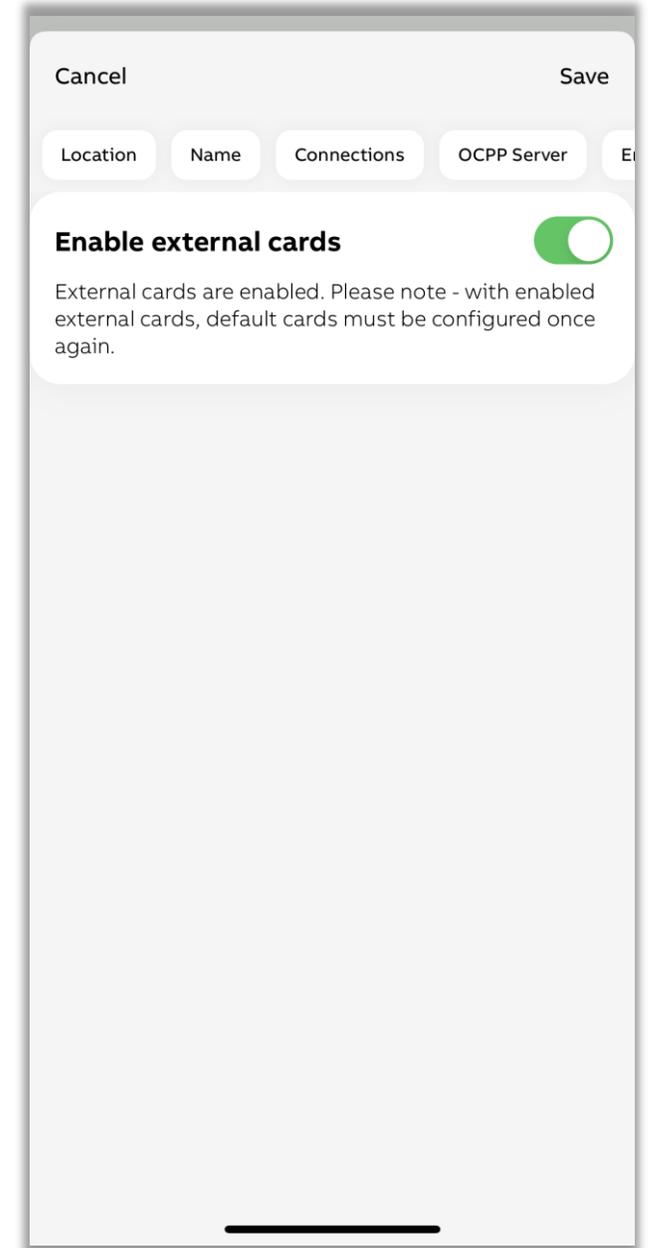


Charging RFID cards

RFID cards are used for the purpose of authenticating charging session such as start or stop.

Charger is compatible with ISO/IEC 14443A, MIFARE™ Classic, 1K and 4K memory.

App provides an option to enable adding external cards. EV driver who will use ABB ChargerSync mobile app could add RFID card by themselves.



Schedules

This is an optional setting and may be mandate according to local regulation (e.g.) UK legislation.

This provides an option to create schedules to limit charging current during certain peak hours or according to the preferred time slot.

The image shows a mobile application interface for creating a new schedule. At the top, there are navigation options: "Cancel" on the left and "Save" on the right. Below this is a horizontal menu with tabs: "Location", "Name", "Connections", "OCPP Server", and "En". The main content area is titled "New Schedule" and contains the following fields:

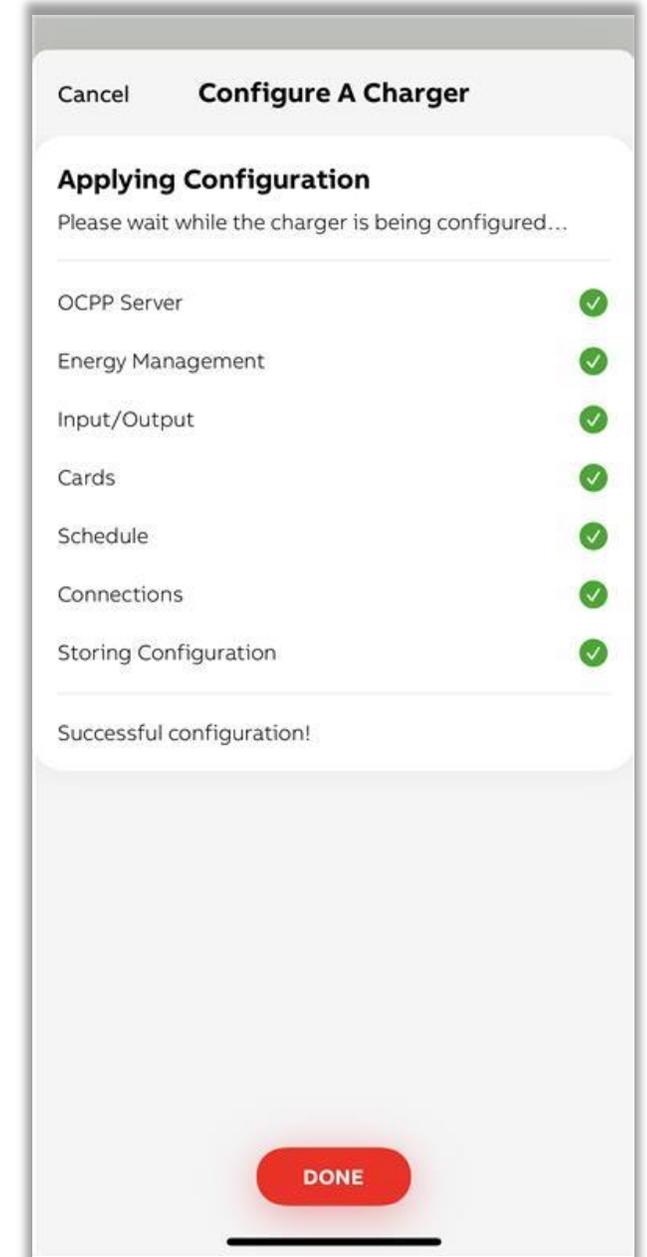
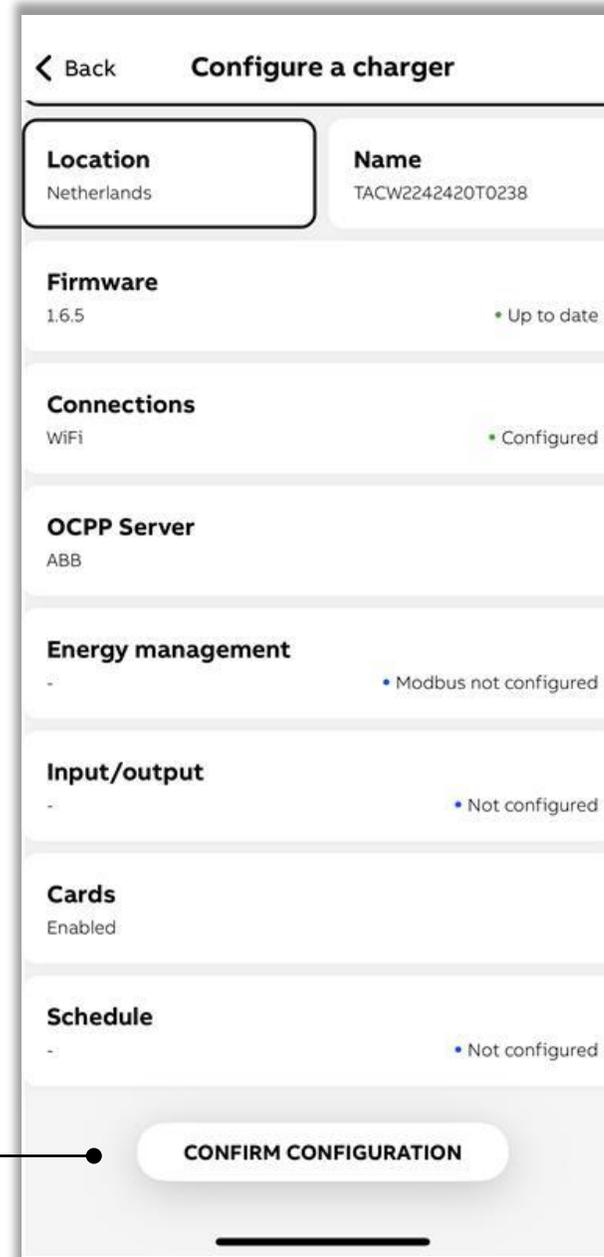
- Start Time:** A time picker set to 00:00.
- End Time:** A time picker set to 00:00.
- Days:** A row of seven buttons representing the days of the week: M, T, W, T, F, S, S.
- Limit Amperage:** A section with the label "Limit Amperage" and "Maximum Current". Below this is a numeric input field containing "32" and a unit selector set to "A".

At the bottom of the "New Schedule" section is a white "ADD" button. Below this section is a "Schedule Plan" section, which is currently empty.

Apply configuration into a charger

After necessary configurations/settings are selected, “confirm configuration” will apply all the configuration into Charger.

- App will show the progress of applying by green/red color.
- If you see any error while applying configuration, then based on the error message settings needs to be corrected and confirm configuration again.

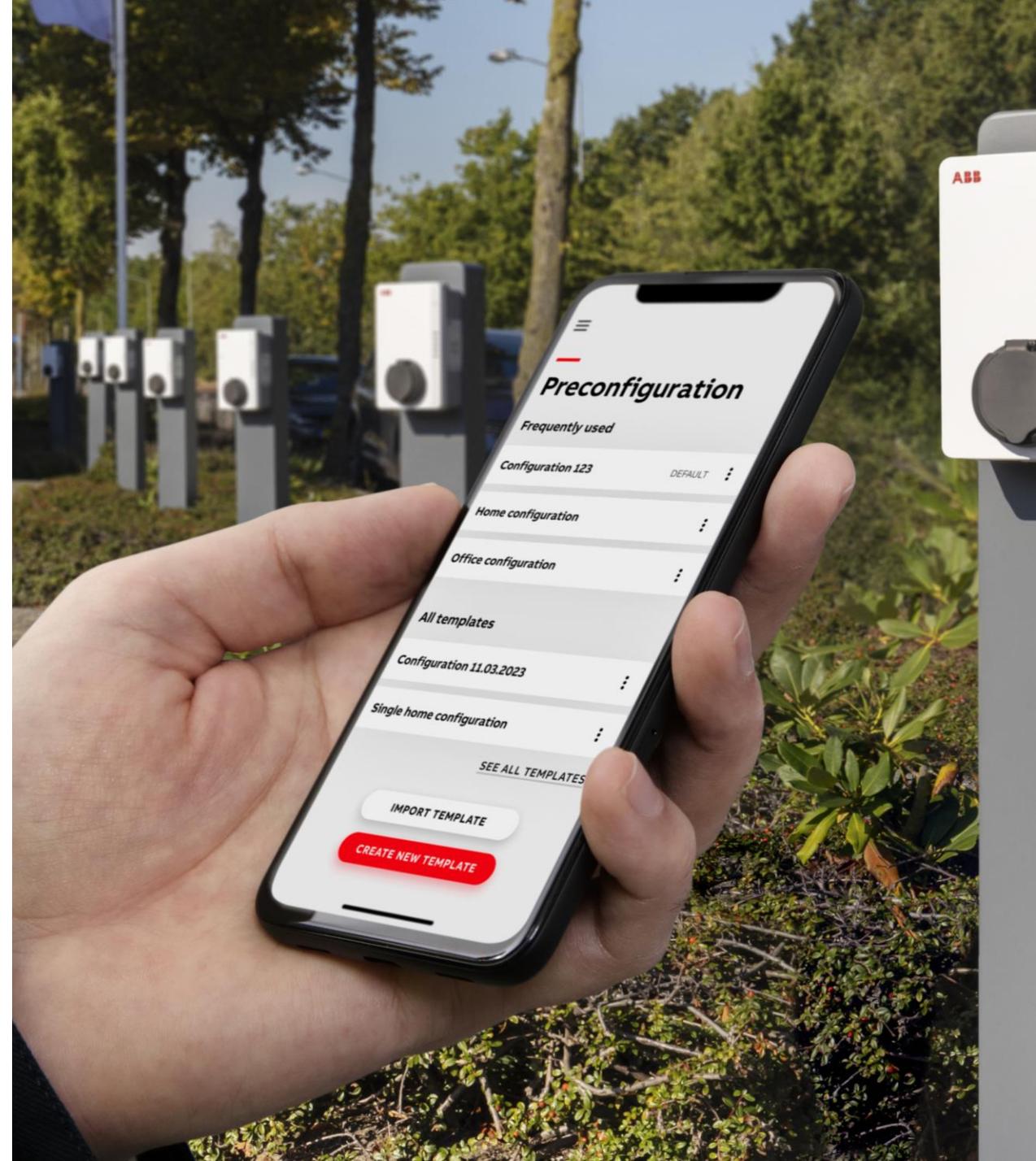


Installation management

Administrative operations

3

Easily manage your installation related activities and save installation time



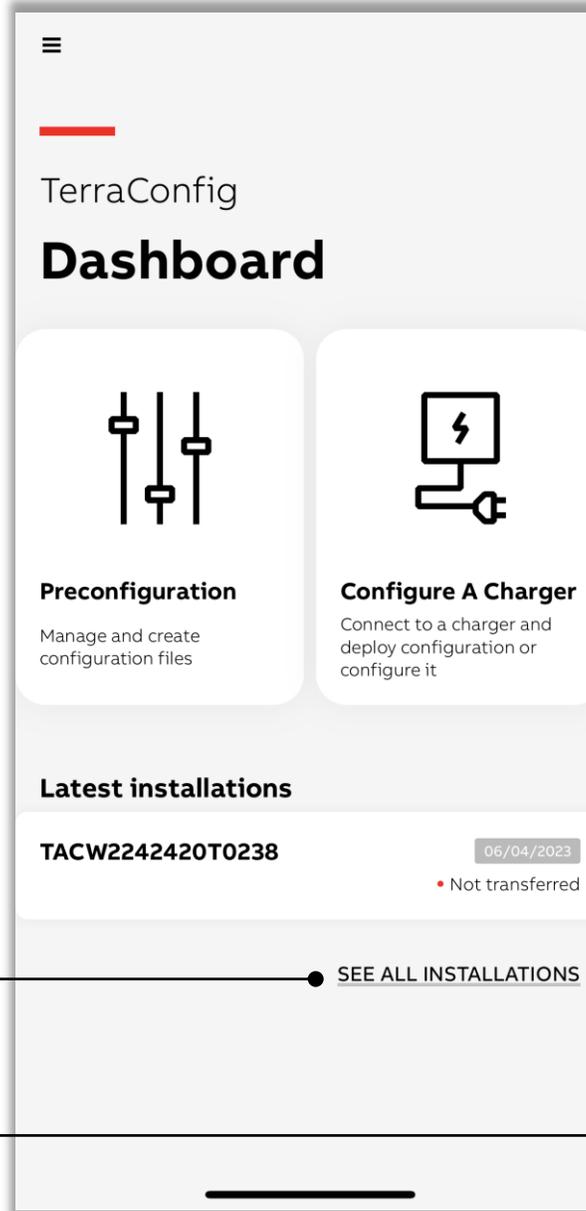
Transfer to owner

After commissioning a charger, you can select one or many and transfer/handover to the owner.

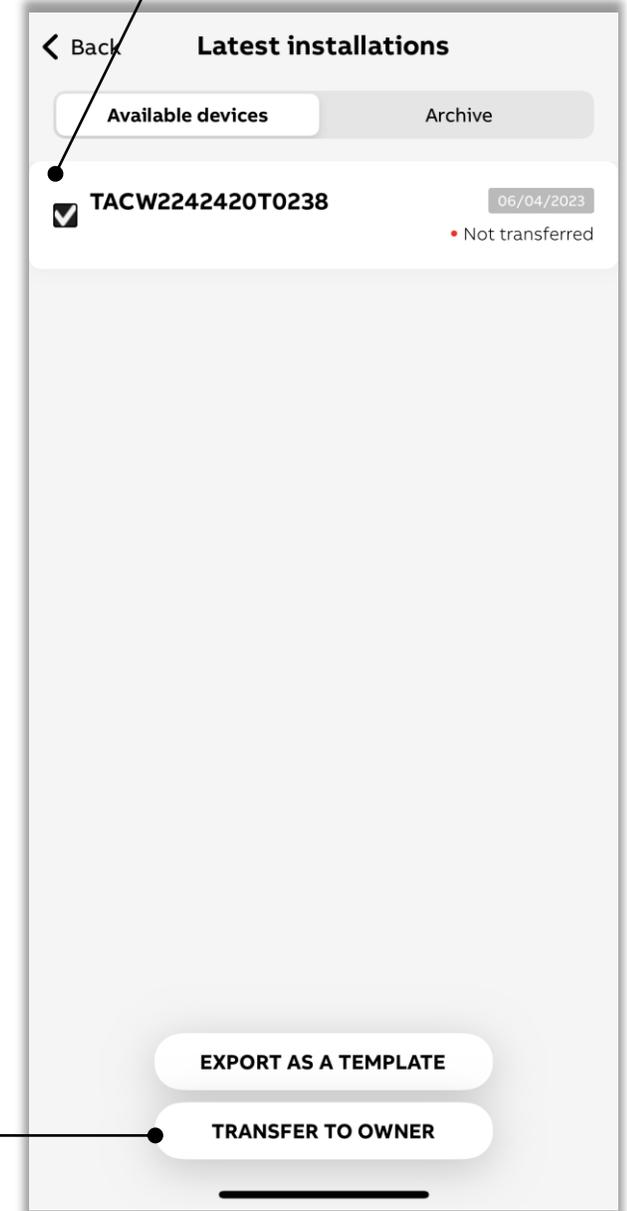
This process will send an email to the owner which will include PIN code of the charger as well.

Click here to select charger from the installation list

Send an email to owner



Select chargers to be transferred from available devices

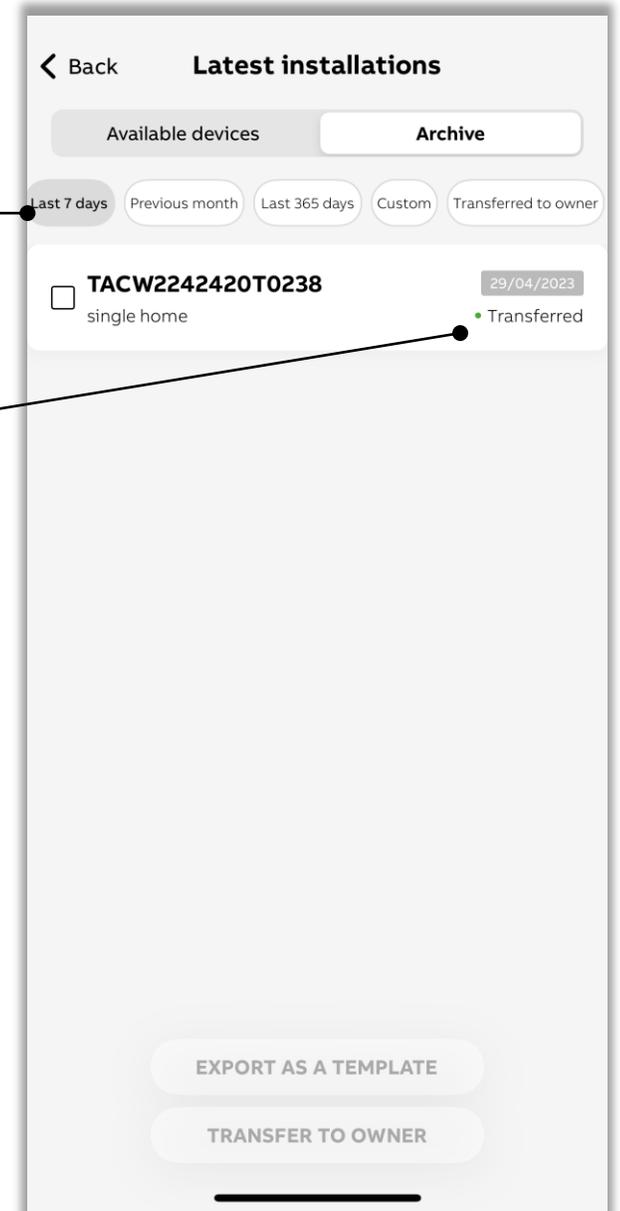


View installation history

Once charger is transferred it will be visible in the archive list.

Different filtering options

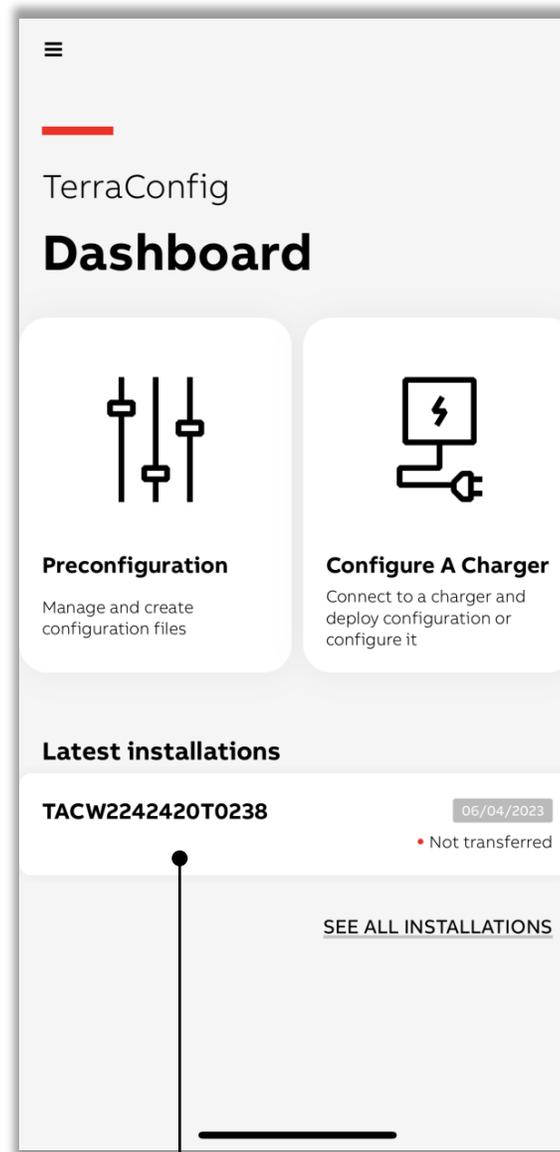
Status will be updated after transfer to owner



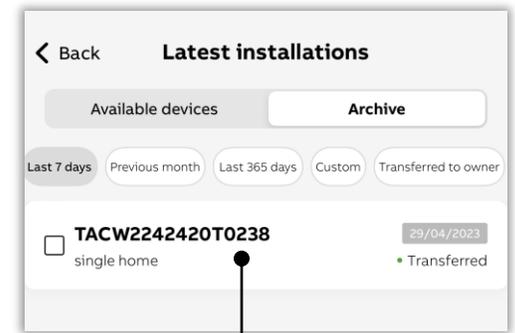
View/modify installed charger configurations

Installed charger details and its configuration can be viewed even if you are away from the charger.

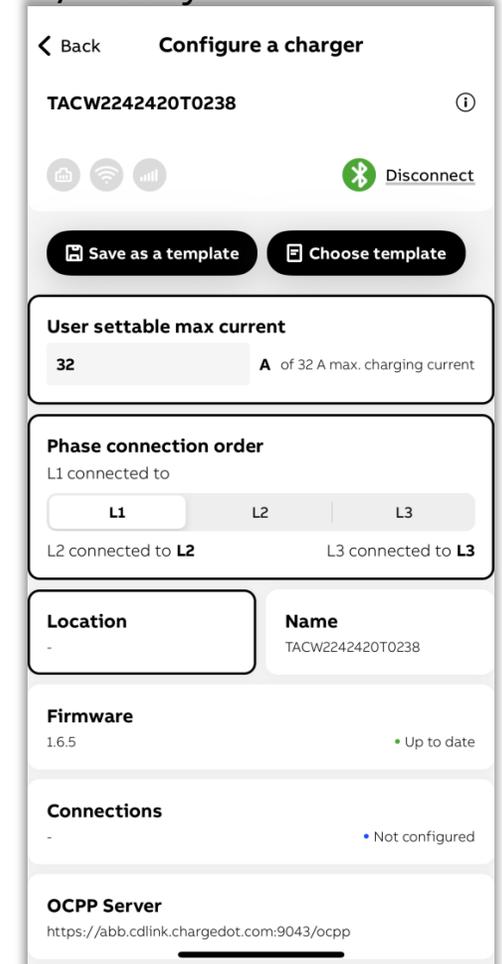
If you are in the vicinity of Bluetooth/connect with charger, you will be able to modify the changes and update the charger with revised configurations.



Click here to view/modify



Click here to view/modify



Charger Log

Configure a charger

TACW2242420T0238

Save as a template Choose template

User settable max current
32 A of 32 A max. charging current

Phase connection order
L1 connected to L1 L2 L3
L2 connected to L2 L3 connected to L3

Location Name
TACW2242420T0238

Firmware 1.6.5 Up to date

Connections Not configured

OCPP Server
https://abb.cdlink.chargedot.com:9043/ocpp

Click here to see product details

Configure a charger

Location of the charger
Netherlands

Performance
Max Power 22 kW
Max Current 32 A
Phases 3
Outlet type 2 socket
Number of socket outlets 1
Connection types 4G, WIFI, LAN, BLE, RFID
Certification

Internet connection
Type WiFi
Status Connected
Mac address 98:D8:63:F9:9D:32

OCPP server info
https://abb.cdlink.chargedot.com:9043/ocpp

Device log

RESET CHARGER

If you see any error, please refer to installation manual

See logs from here

Device log

TACW2242420T0238

Information
6 April 2023 at 21:48
Log description
Pull the gun CP-12V
Additional information
AD sampling value: 0

Information
6 April 2023 at 18:32
Log description
System timing

Information
6 April 2023 at 18:29
Log description
System timing

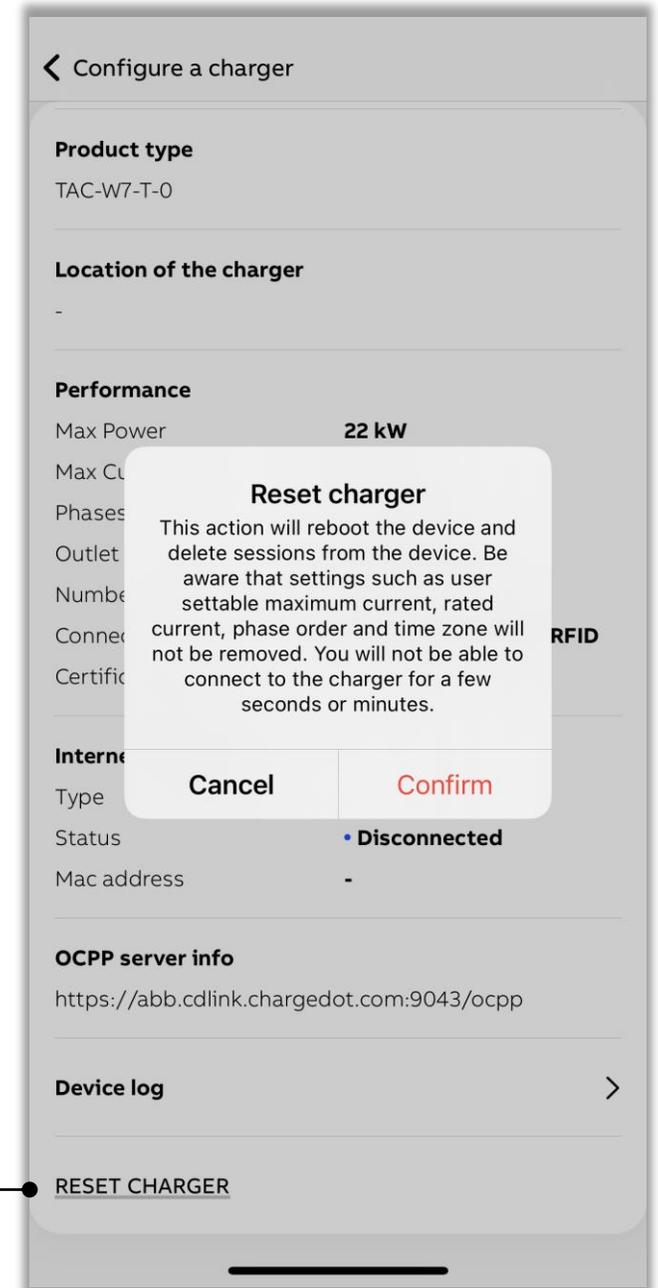
Information
6 April 2023 at 18:20
Log description
The network is connected
Additional information
Signal strength: 0

Reset charger

This is an option provided to erase and bring the chargers to factory defaults which includes removal of ABB RFID cards as well.

Be cautious to use this option.

To reset charger



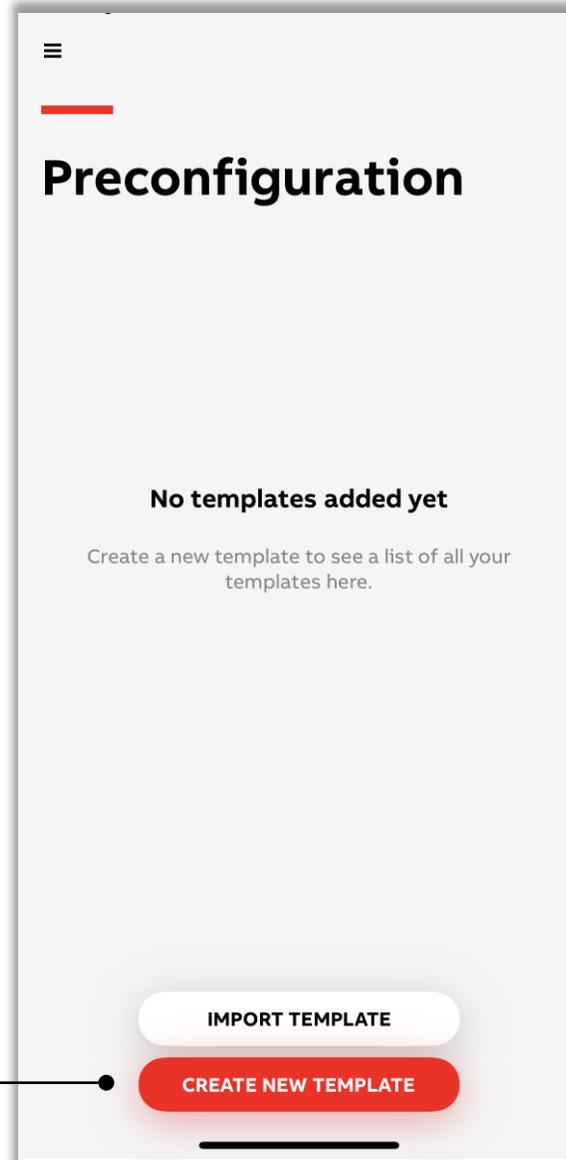
Commissioning by preconfiguration

Configuration template file helps to simplify installer job and reduce on-site commissioning time.

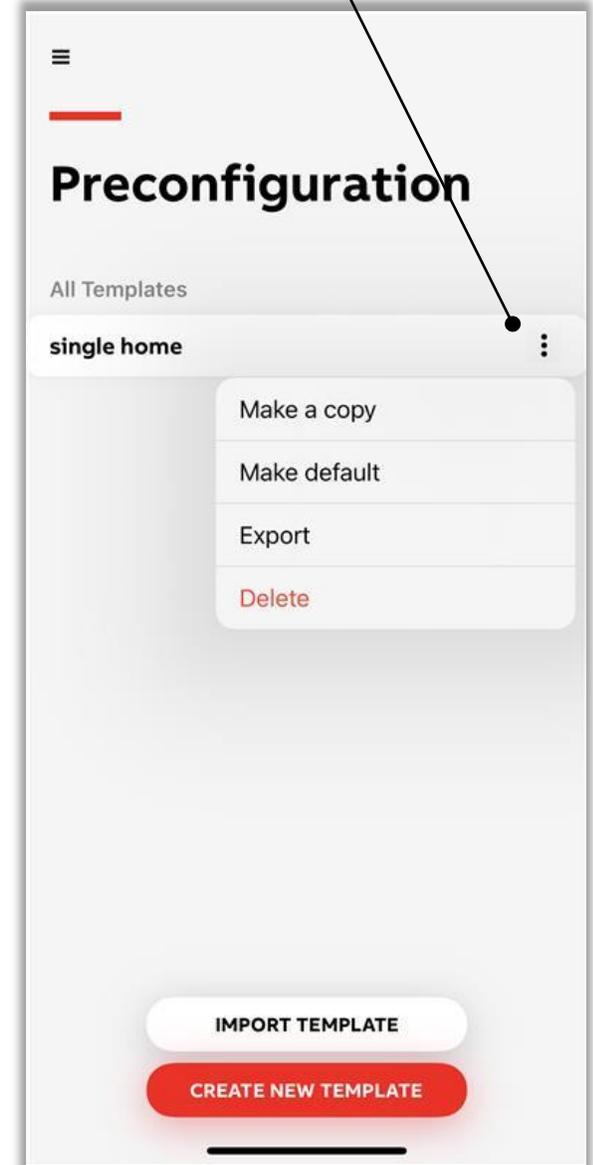
Setup a configuration once, and save that into the file, reuse for different installations.

In dashboard, click on preconfiguration to setup.

If you already have a template file, it can be imported/used as default setting for each charger/make another file out of it.

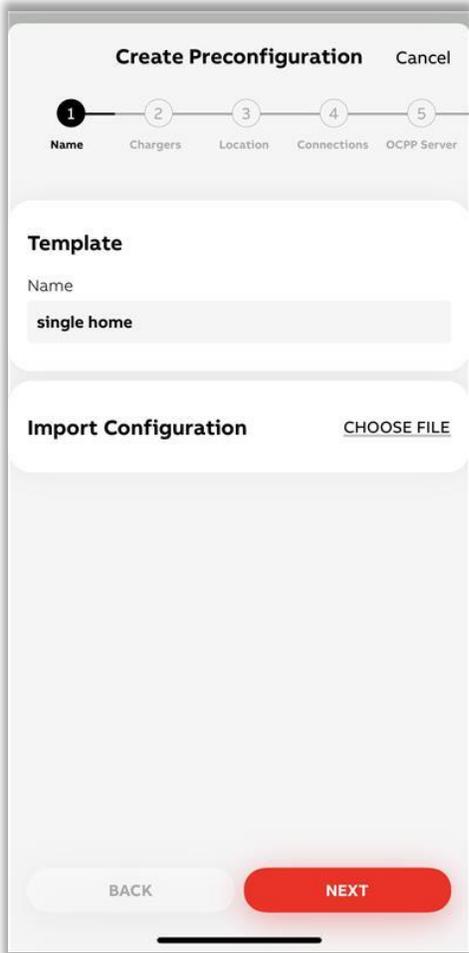


App guides to setup a template file step by step



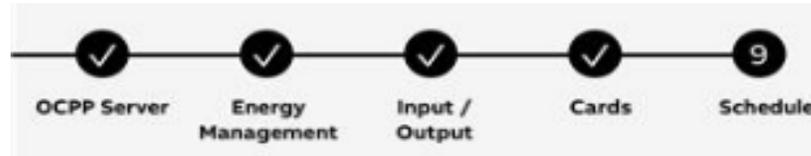
Example of new template file

App guides step by step for creation of preconfiguration template file. And the configuration details are same as configure a charger process



Add chargers SN and PIN

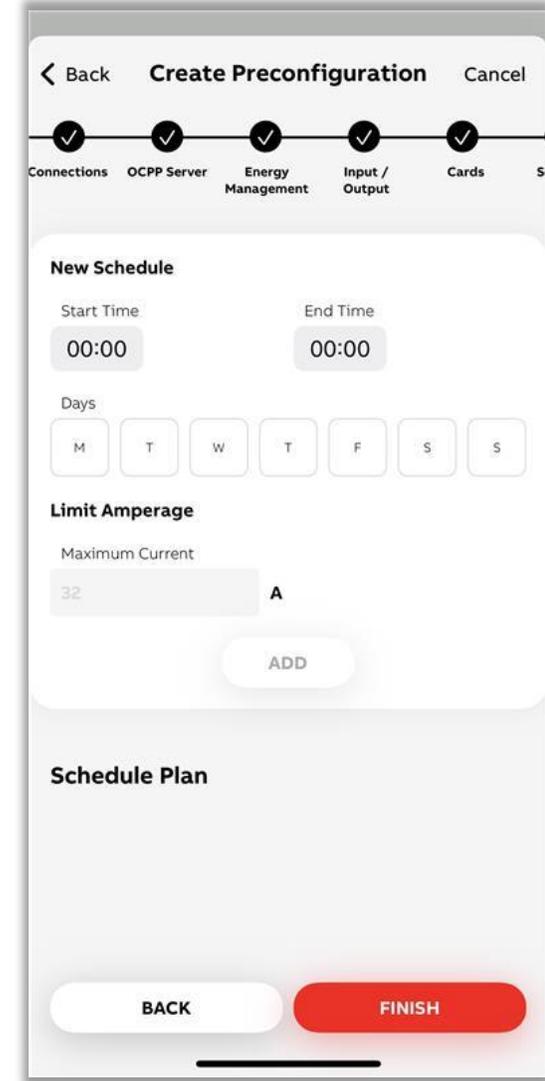
Charger connectivity settings



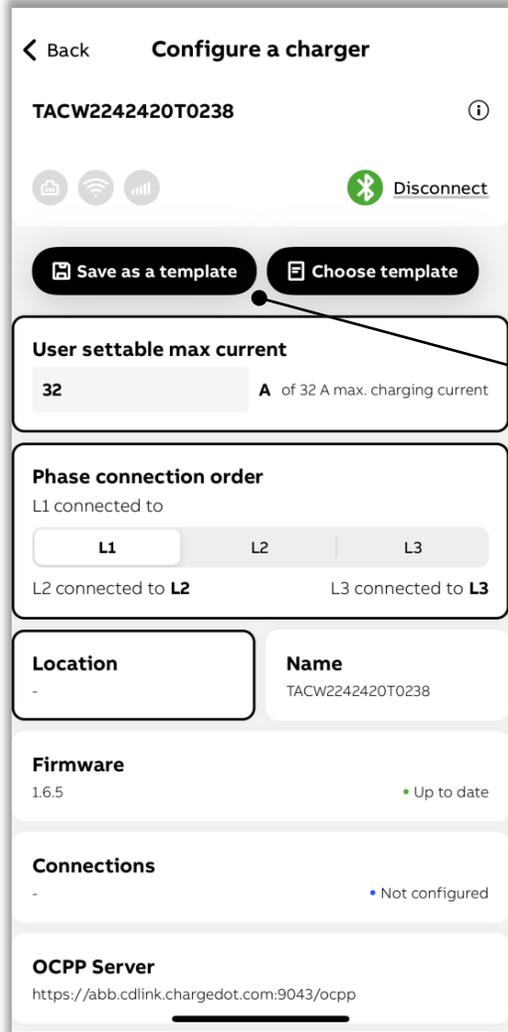
ABB/External URL from TC portal/Custom server

Electrical installation related

Country specific regulations or limits



Creating template file from installation history

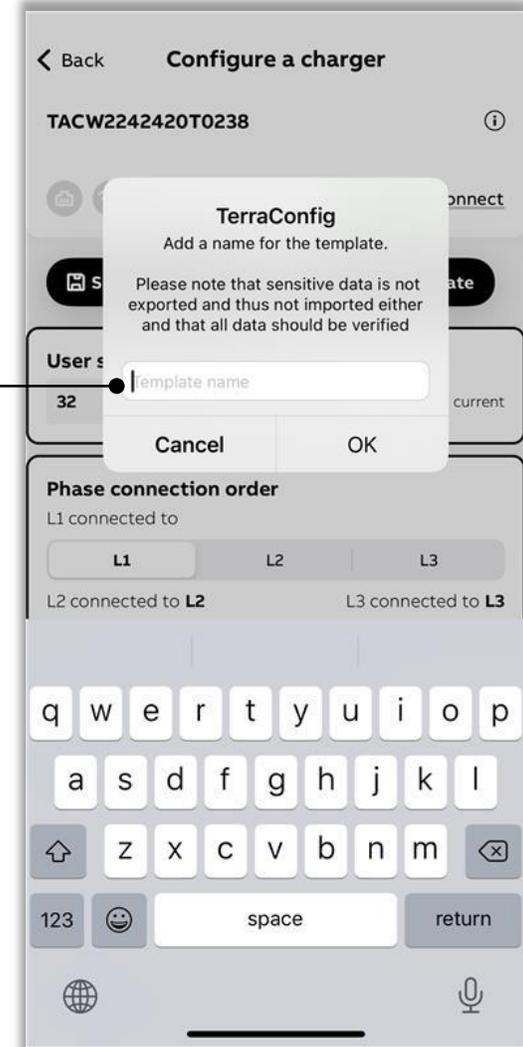


While configuring a charger or viewing the completed installation (from installation history) could be saved as a template file

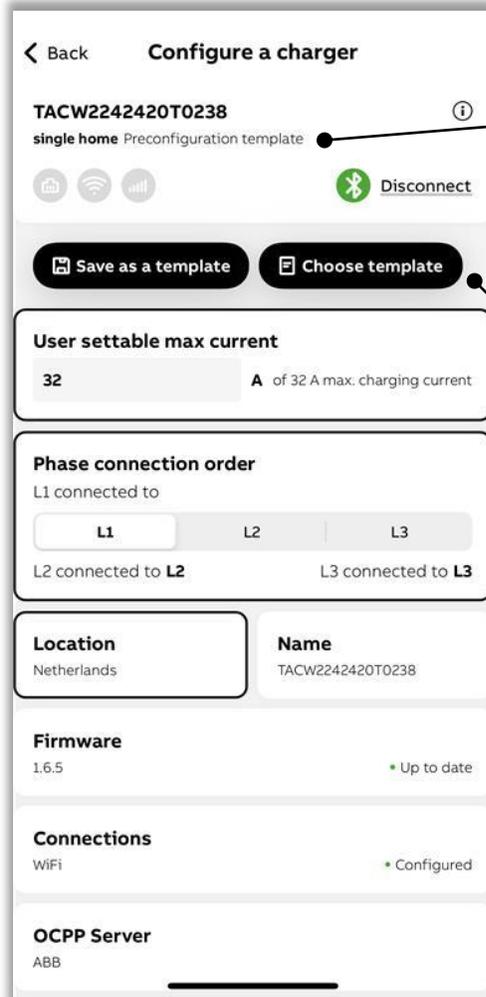


Name template file, now template file is ready to use for installation

As the template file could be shared across, it will not store sensitive data, those need to be entered/ configured during commissioning

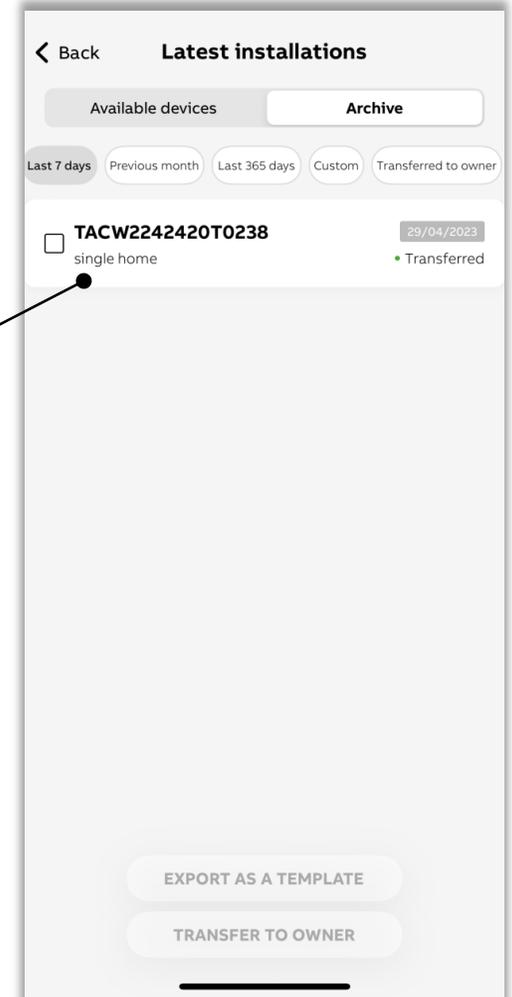


Example of applying template file for a installation



Once template is selected, app indicates which template file is used

Select a template file and review the configuration settings for a specific installation (i.e.) No need to configure the setting every time/prepare early prior to installation and apply during installation



Applied template information also visible in the installation history after configuration



Email us chargingsupport@abb.com for any support on TerraConfig mobile app