



JUNE 2020

# Terra AC: ChargerSync App & Essentials Operational portal

## Introduction

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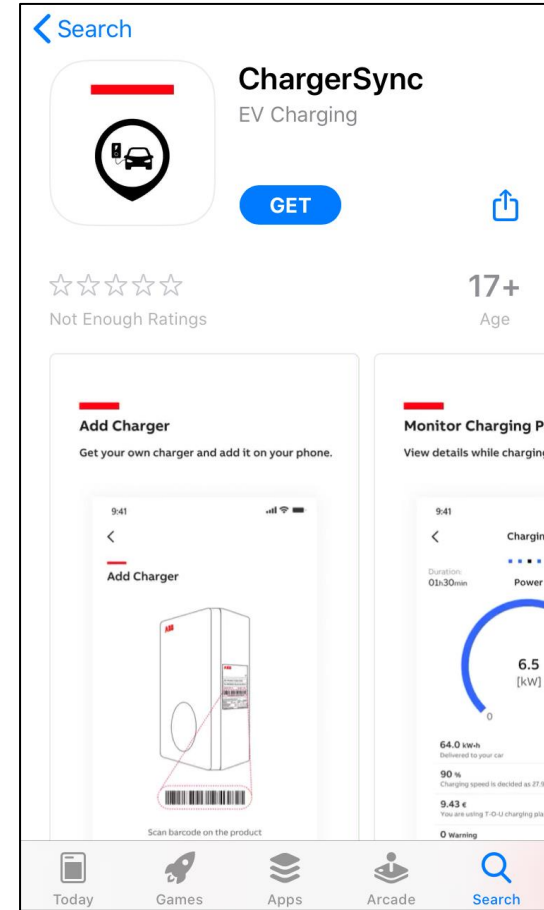
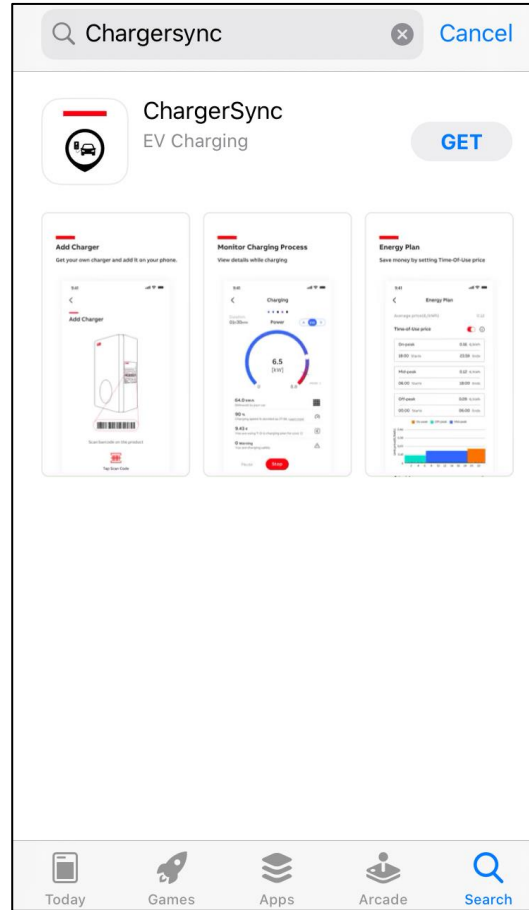
App

# Where to find the ChargerSync App?

By 'ChargerSync' in App or Google play store

*Note:*

*Previously downloaded iOS App version need to be updated.*



# Create an account + log in

Create your own free account  
(For the EV driver)

CHARGER Sync English

## Log in

E-mail address

Password

Forgot your password?

Login

Need an account? [Sign up](#)

CHARGER Sync English

## Create Account

Christian

Christian.van-maurik@nl.abb.com

I have read and agree to the [Privacy Policy](#) and [Terms of Service](#).

Continue

CHARGER Sync English

## Thank you!

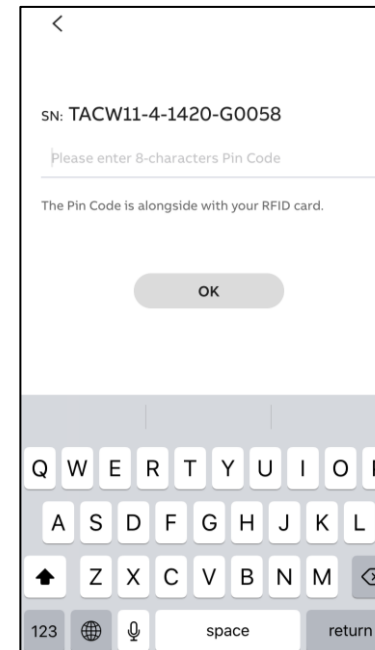
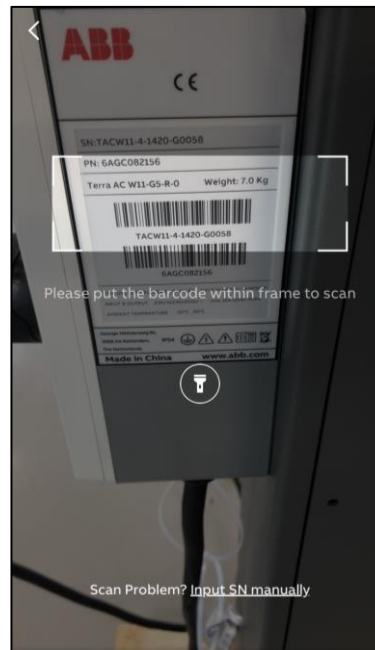
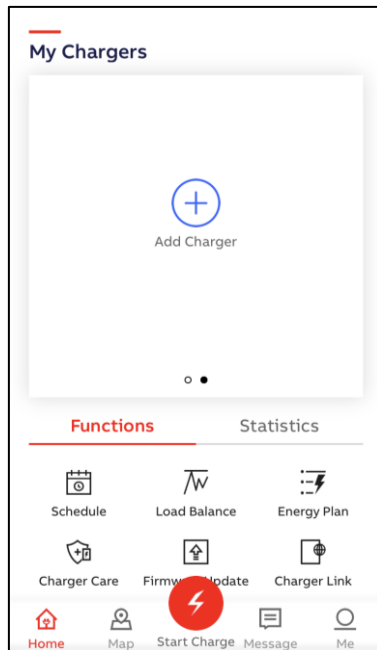
We have sent you an email to confirm your account.

OK

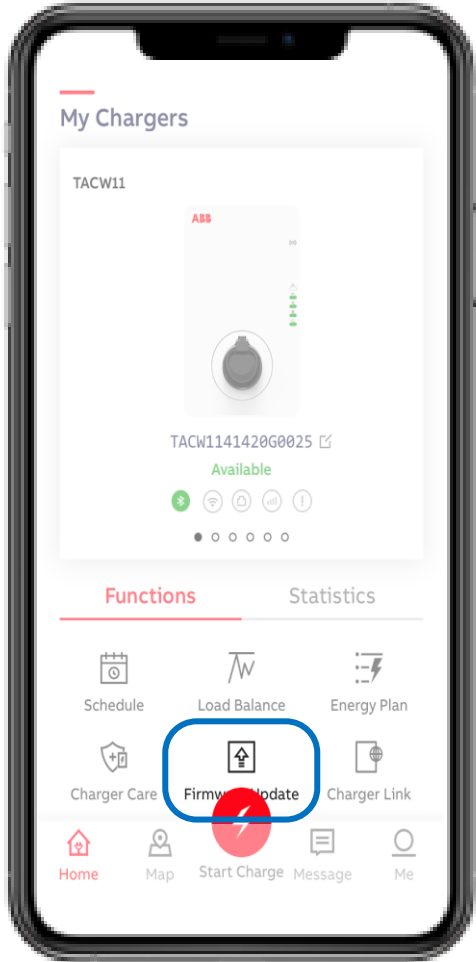
Didn't receive the email? [Resend](#)

# Add Terra AC to your account

1. Install Terra AC
2. Select 'Add Charger' in home screen
3. Scan (top) barcode on the charger or manually input the charger serial number.
4. Enter the PIN code which can be found with the RFID card. This will establish the 'binding' between user account and charger. Note: !Do not lose the PIN code. In case of loss, there is a separate manual service team ticket procedure.

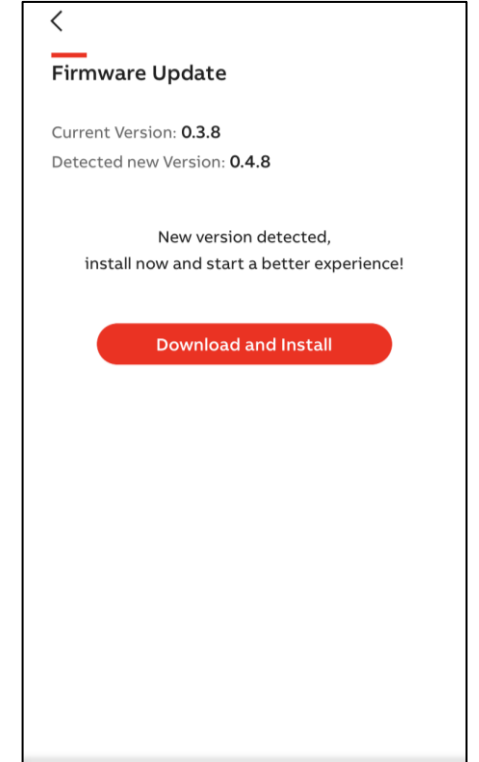
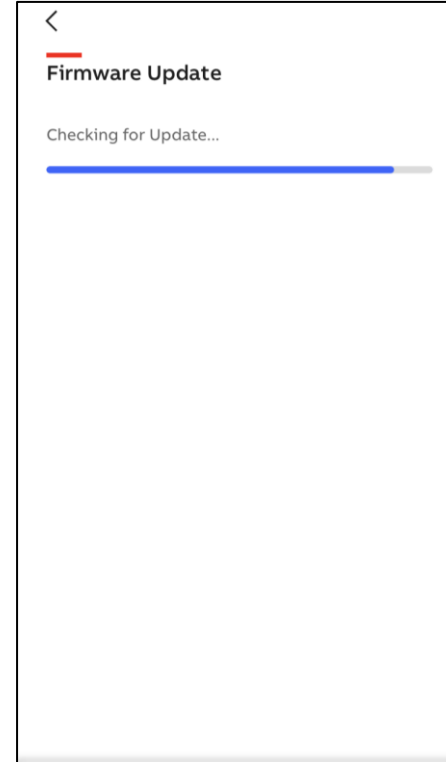


# Home screen – Firmware Update

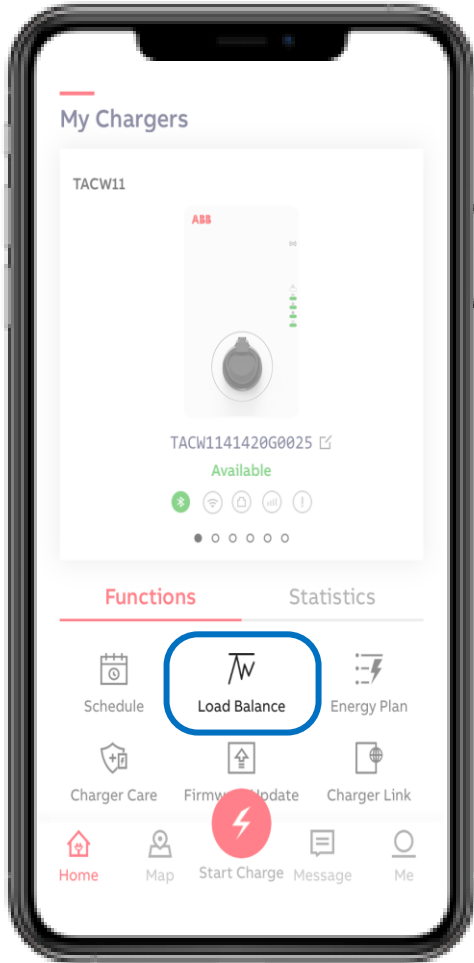


Update charger firmware to latest available version

- Update takes +/- 5 min
- Keep charger and phone powered during update
- Keep Bluetooth connection and phone network settings untouched
- !Do not upgrade during charging session



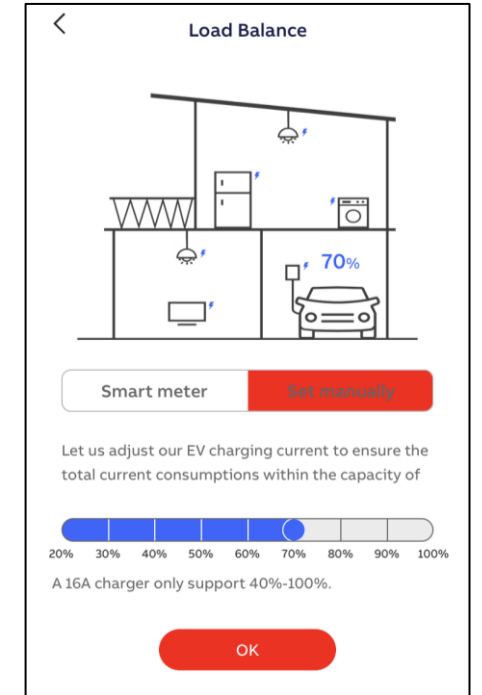
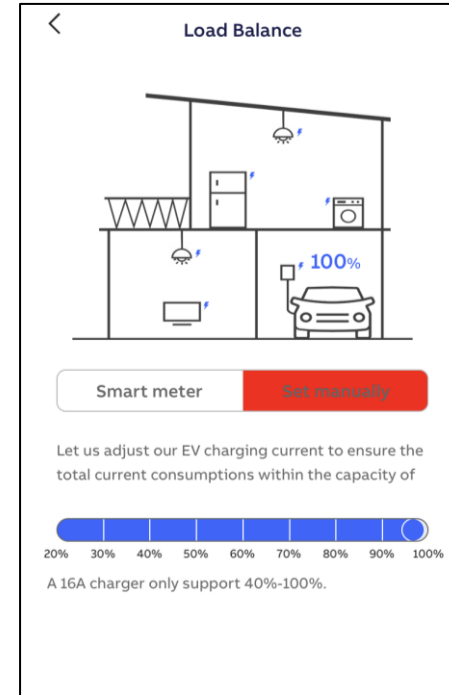
# Home screen – Static Load Balance



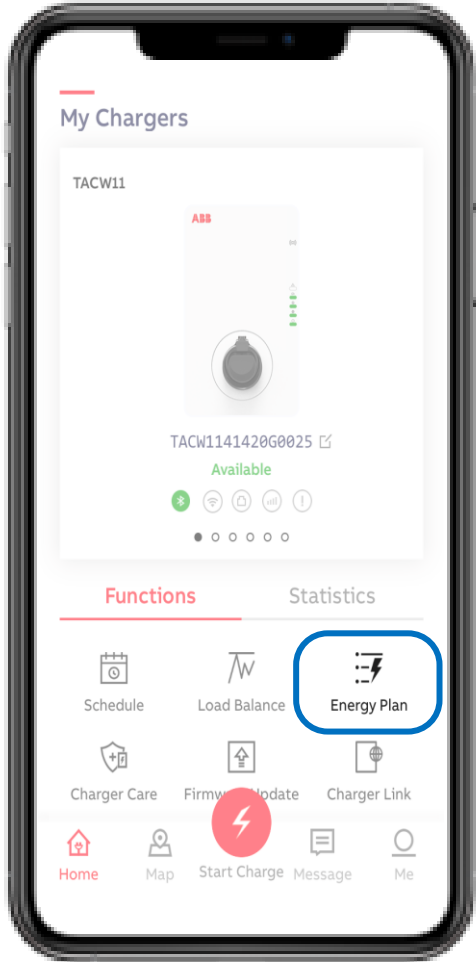
With Load Balance a user selected power limit can be set. The option 'Set manually' is ready pre-selected. The option 'Smart meter' will be released later.

- By sliding the blue dot in the bar preferred percentage can be set.
- Confirm by 'OK'

*To limit energy costs in peak energy period.*

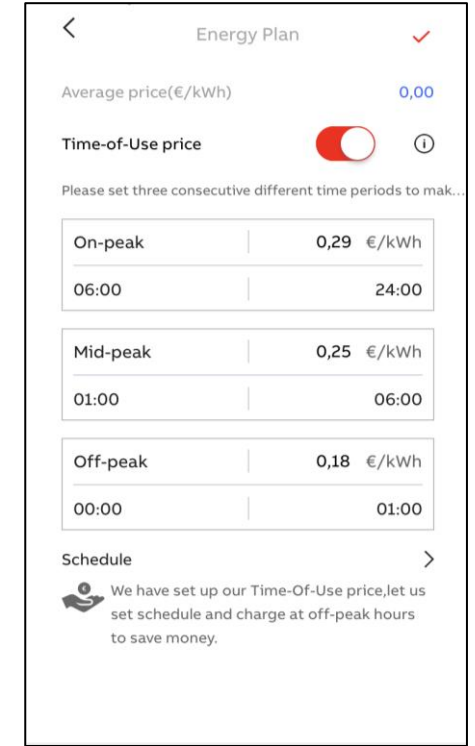


# Home screen – Energy Plan



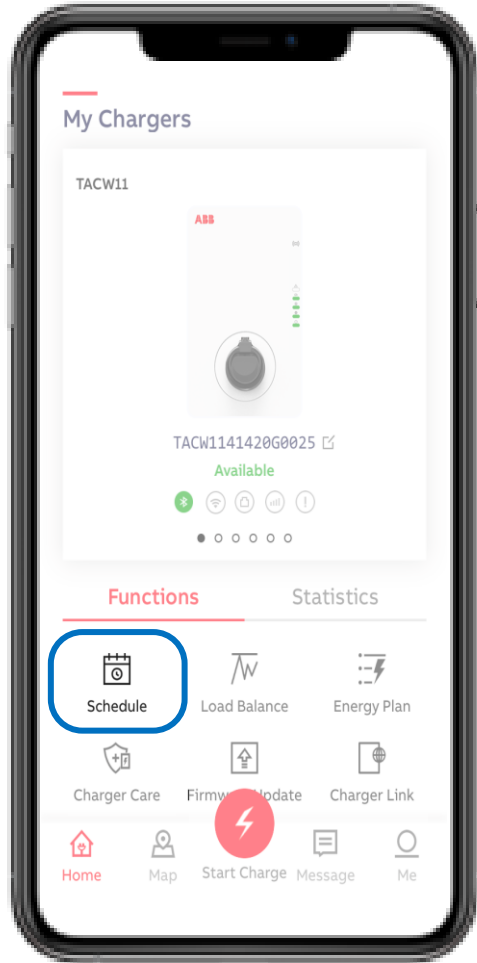
With Energy Plan price per kWh can be set and can be used for own energy monitoring.

*Different currency and time of use prices will be released later.*



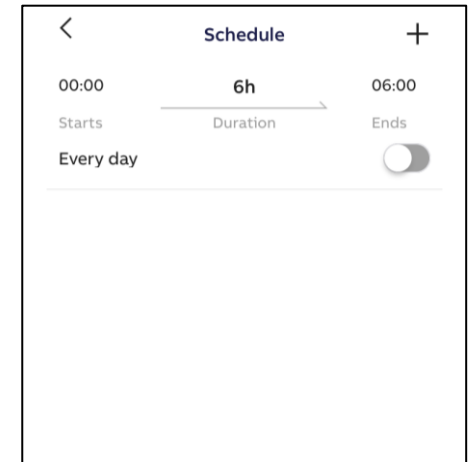
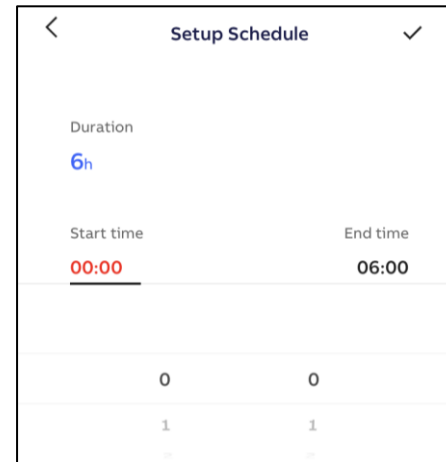
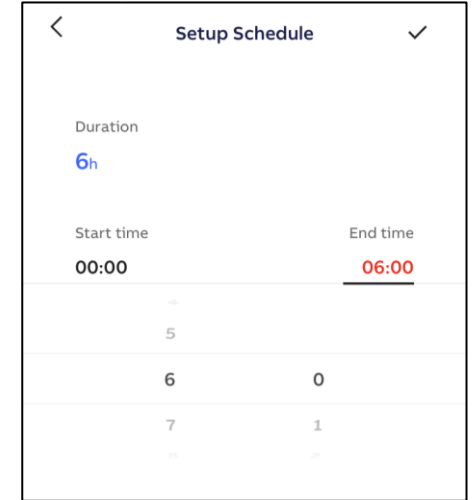
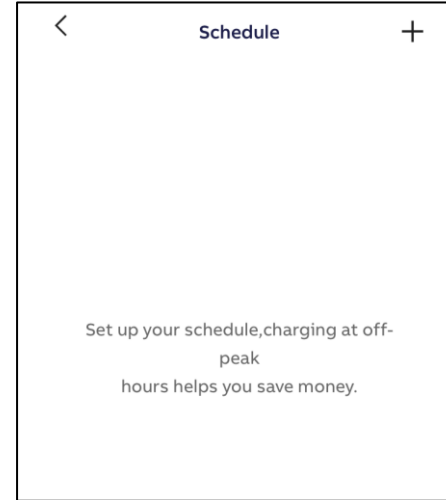


# Home screen – Schedule

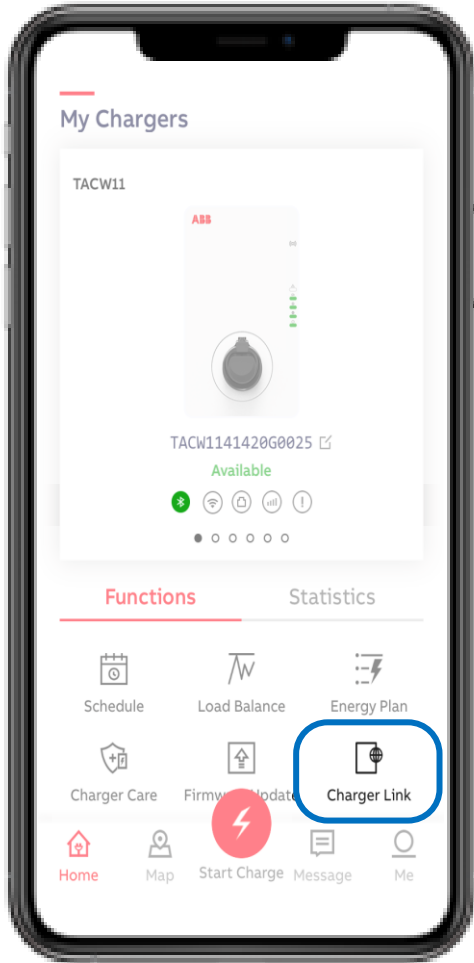


With Schedule specific charge time period(s) can be set to start delayed charge session.

Free access mode as there is no authorization needed when making use of Schedule.



## Home screen – Charger Link






With Charger Link the connectivity option can be selected between charger and ABB server back-end.

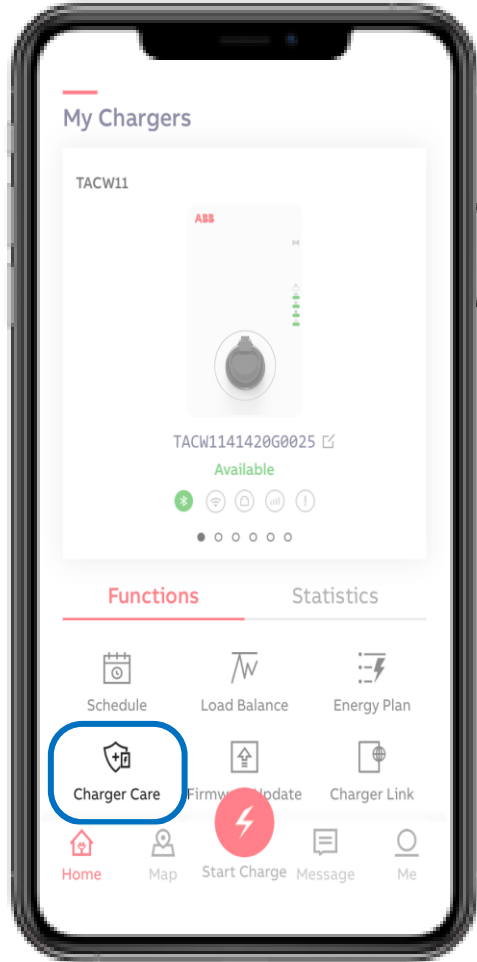
Available connectivity options depends on charger model.

Options are LAN, WIFI, 4G (is optional feature)

*Charger Link function in Charger Sync app currently not supported will be released later.*

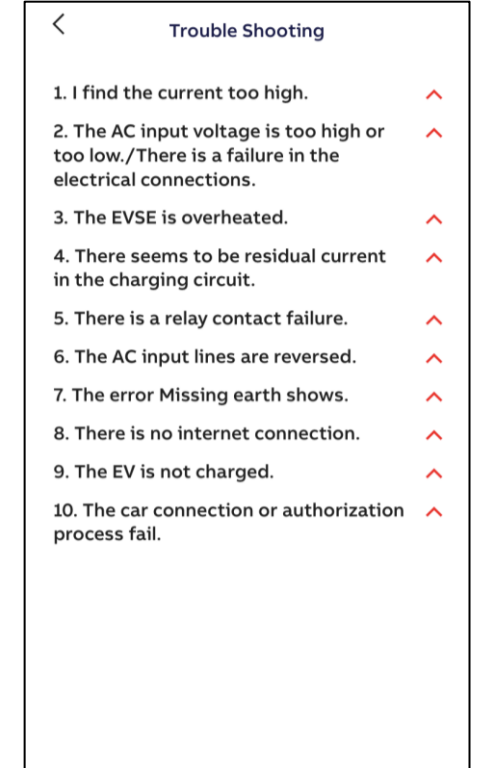
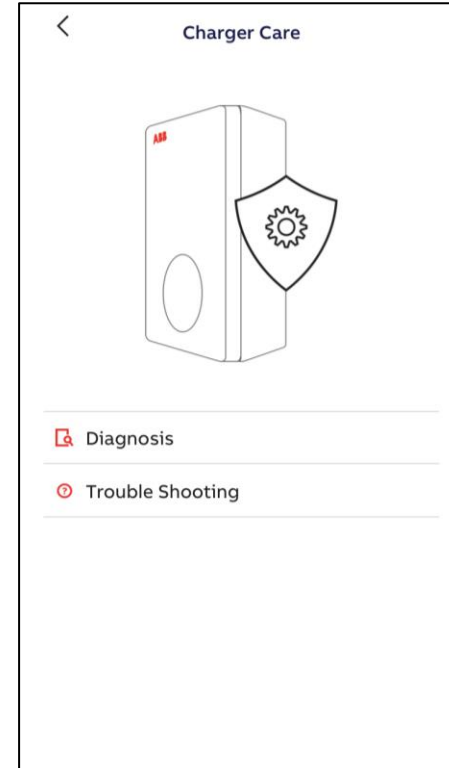
-  LAN = plug & play (requires an ethernet cable)
-  WIFI = settings can be configured via Terra Config App
-  4G = certain (nano) sim cards work automatically or can otherwise configured via Terra Config App

# Home screen – Charger Care

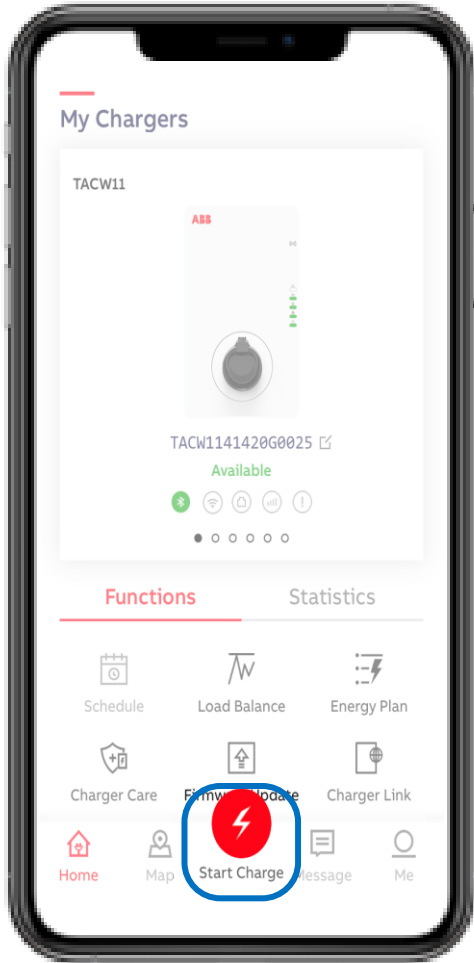


Basic Trouble Shooting guide for the EV driver can be in Charger Care.

With Diagnosis the charger log file can be found (*to be released later*).



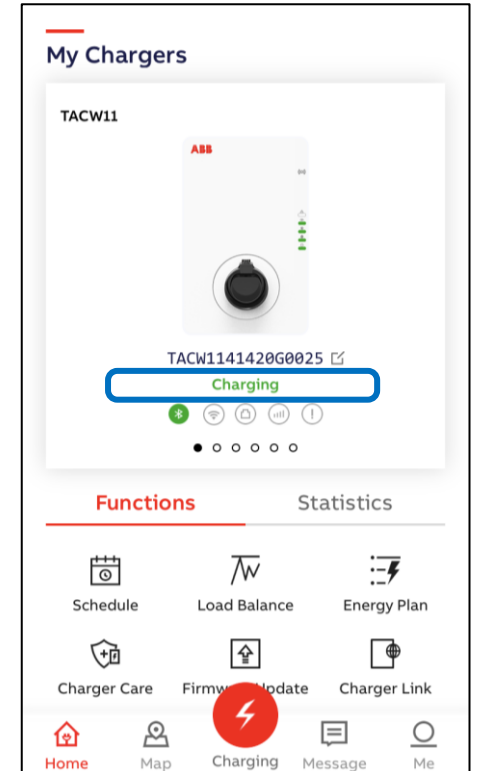
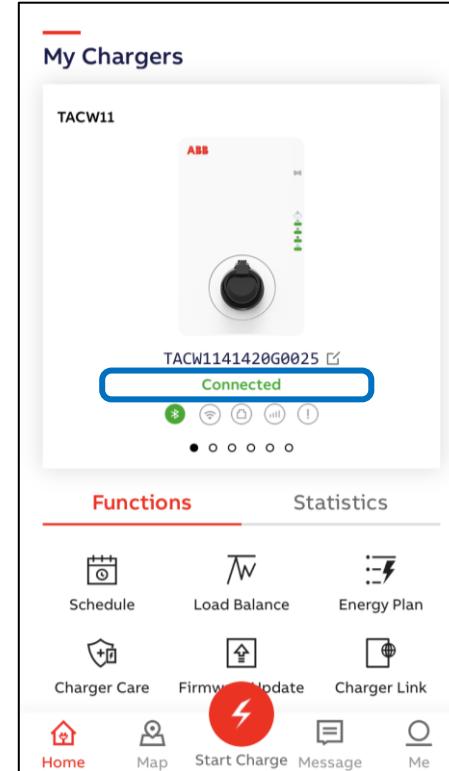
# Home screen – Start – Charging



When connecting the charger to the EV the status message bar will change from 'Available' to 'Connected'.

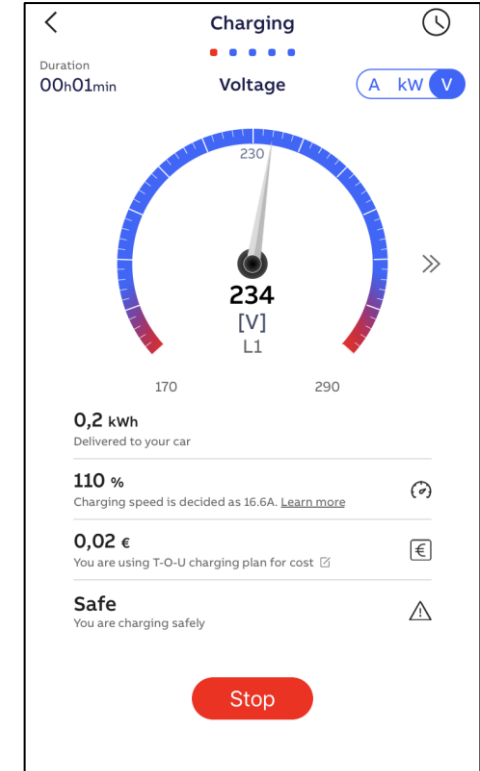
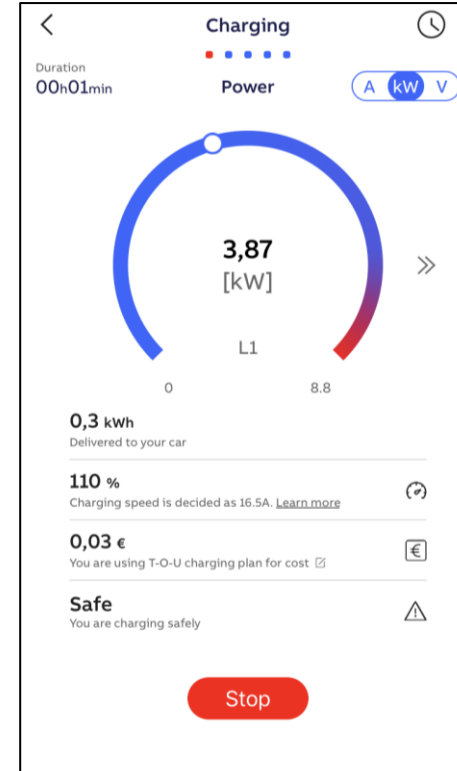
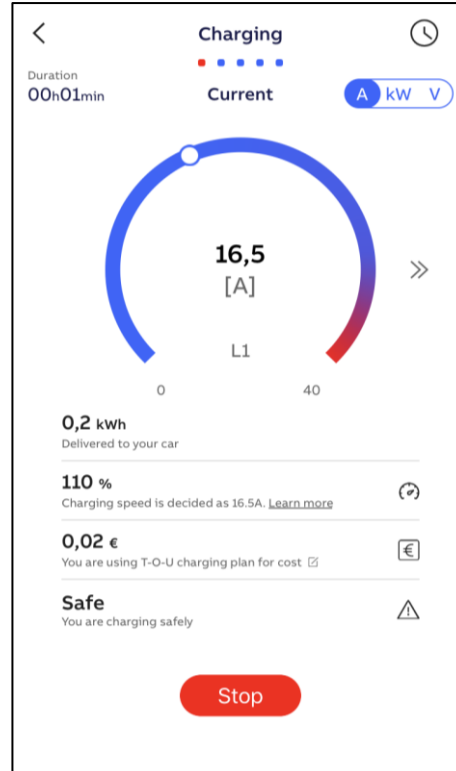
Charge session can be start via red 'Start Charge' button . The charge session will start after quick check between charger and EV (seconds).

Status message bar will change in 'Charging'.



# Charging monitoring data

When charging the following monitoring data can be displayed per phase: Current, Power and Voltage.

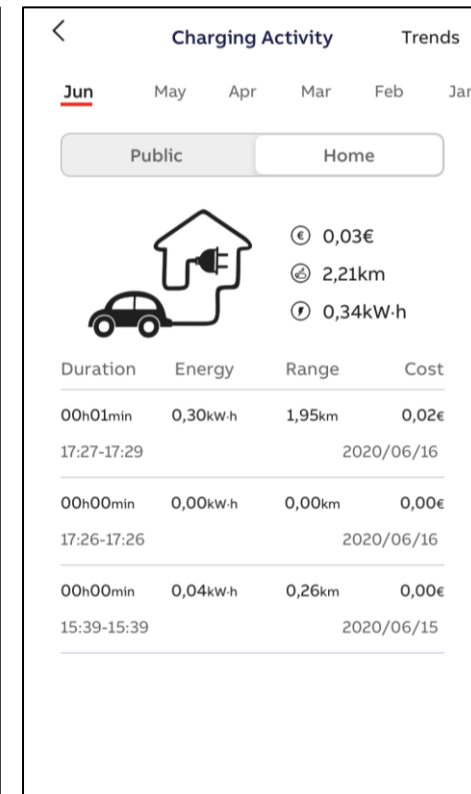
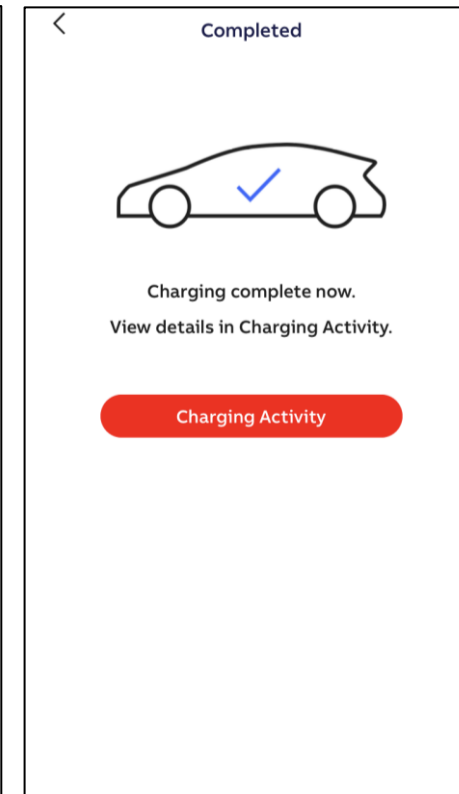
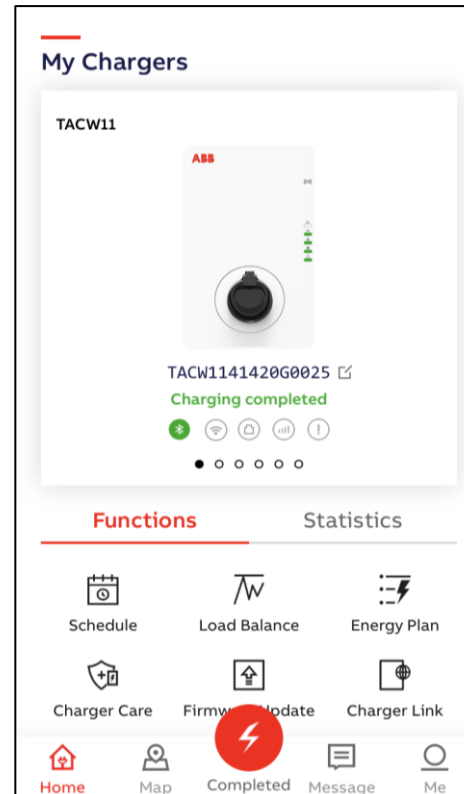
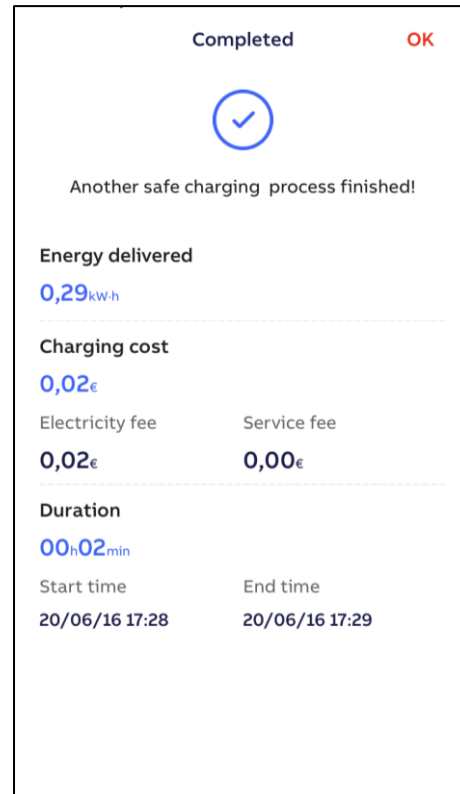


# Charging Complete

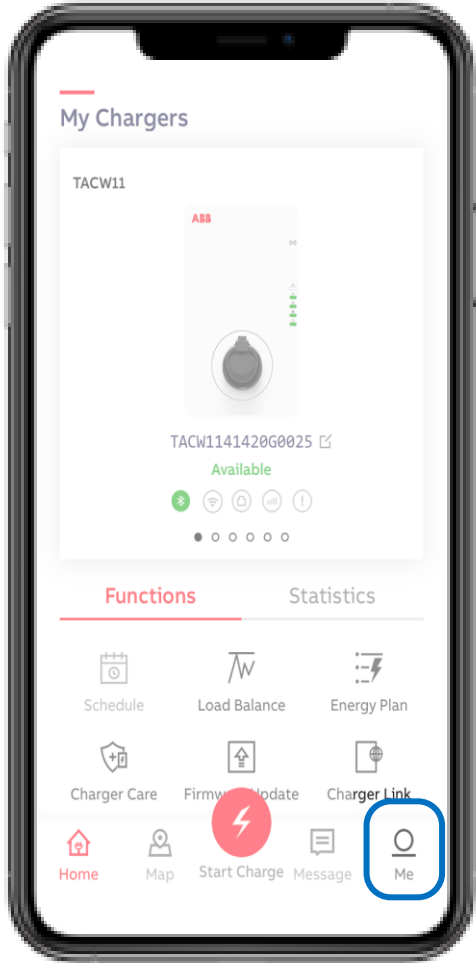
To Stop the charge session can be done via the red 'stop' button. Status bar will change in 'Charging complete'.

Charge session details will be showed in 'Completed'.

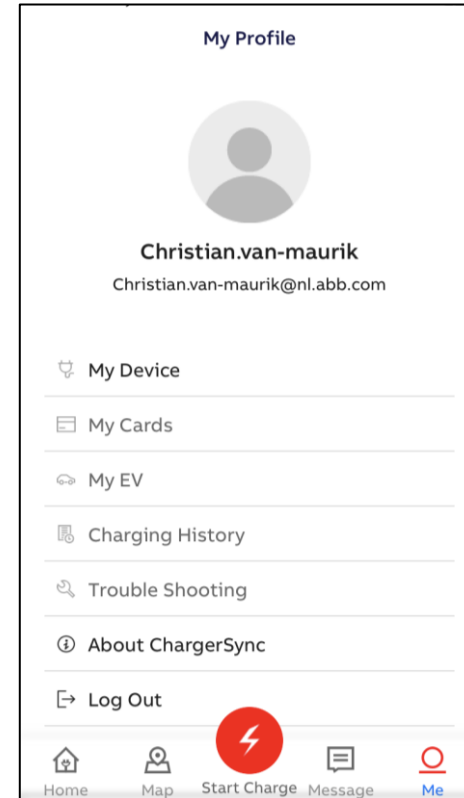
All Charge sessions can be found with 'Charging Activity'.



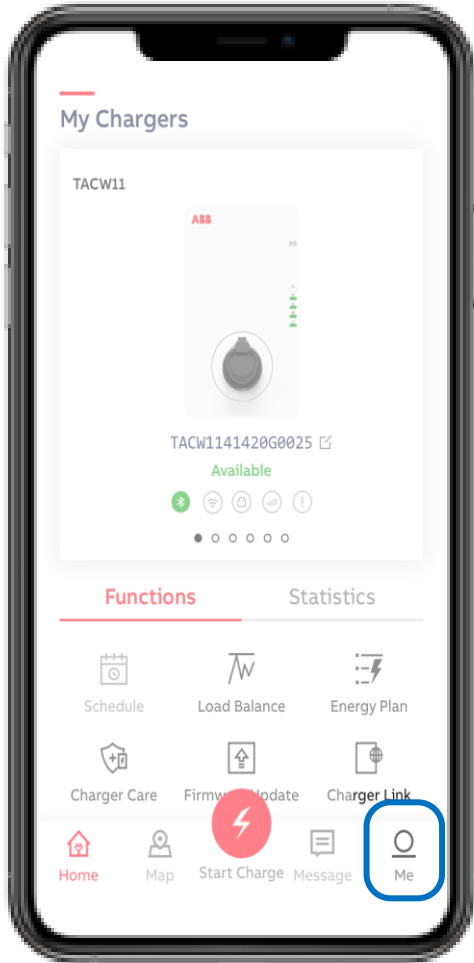
# Home screen – Me – User Account



User account details can be found in 'Me'.  
As well the option to 'Log Out' from user account.



# Home screen – Me – Unbind the Charger



In 'My devices' the list of owned device(s) to the user account can be found.

(Authentication via PIN code)

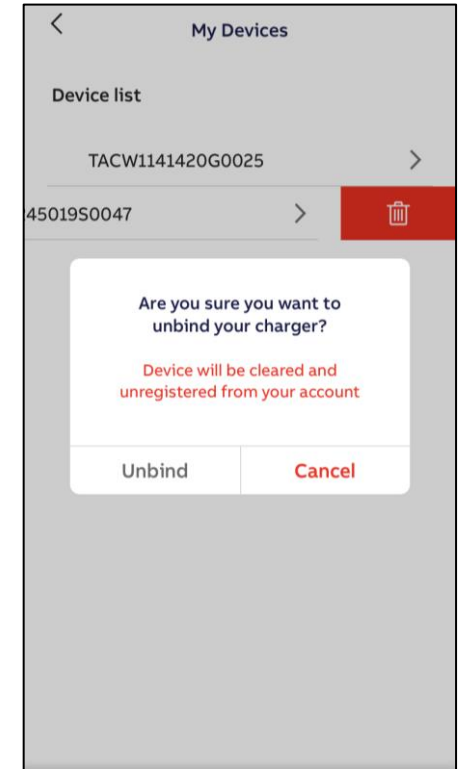
To remove the device(s) from the user account can be done via 'unbind' option.

Slide the device from right to left and use the red delete bin to open the unbind option.

By 'Unbind' the charger will be removed from the user account.

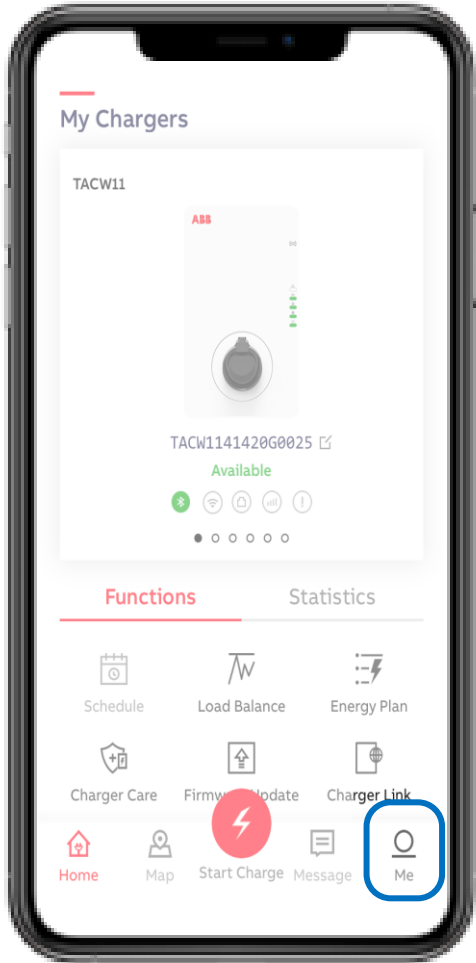
Note:

the owner of the PIN code is the owner of the Charger

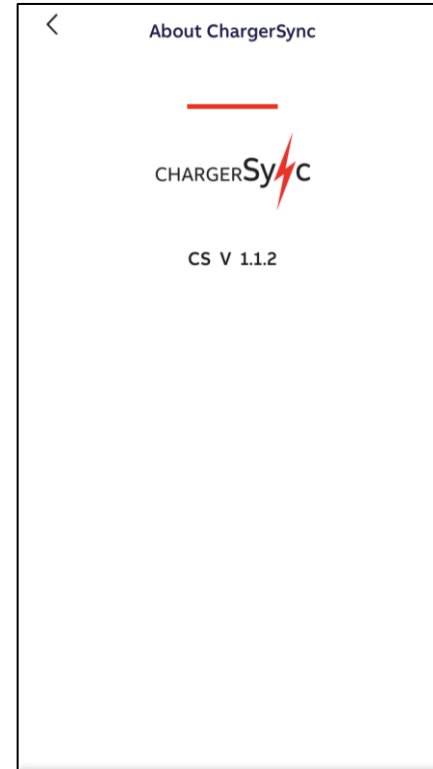




# Home screen – Me – Charger Sync App version



In 'About ChargerSync' the App version number can be found.



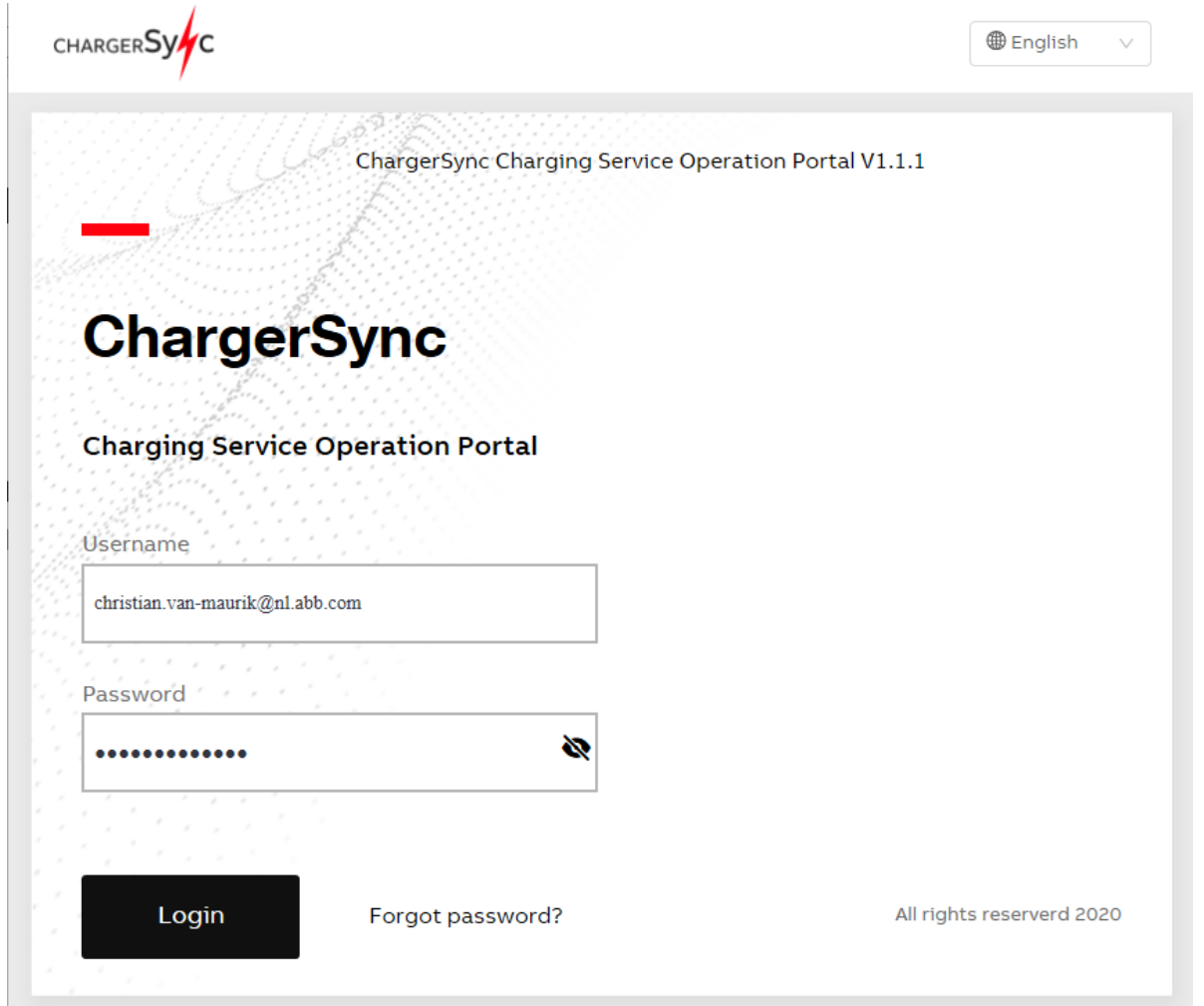
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# Portal

# ChargerSync Essentials Operational portal

*Available in August as a self subscription basic level operator portal*

Account owner can be the remote administrator of a site/installation/group of chargers. In order to do that the owner creates an account and adds chargers and users to that account.



# ChargerSync Essentials Operational portal - Charging Site

Example of Charging Site:

Charging Site 'test site Delft' with two chargers

List of chargers can be filtered by  
Connector type/phase(s)/status/rated power

To Add new charger



The screenshot displays the CHARGERSync Operational portal interface. The top navigation bar includes 'Overview', 'Charging Site', 'User Management', and 'Charging Session'. The 'Charging Site' tab is active, showing a site list on the left with 'test site Delft' selected. The main content area shows the site details for 'test site Delft' (Heertjeslaan, 2629 JD Delft, Netherlands). Key metrics are displayed: Connector Type (2 icons), Power Supply Phase (1 icon), Charger Status (2 Available, 0 Charging, 0 Unavailable), and Rated Output Power (1 7.4kW, 1 11kW, 0 22kW). A table lists two chargers:

NO.	Alias/SN	Connector	Phase	Network	Status	Derating	Current	Remote Control
1	TACW1141420G0025 TACW1141420G0025	Icon	Icon	4G	Available	70%	11,2A	Icons
2	TACW741320G0018 TACW741320G0018	Icon	Icon	4G	Available	100%	32A	Icons

# ChargerSync Essentials Operational portal - Charging Site

Example of Charging Site:

Status connectivity option

Remote control

Restart/stop/status details/ static load management

Set Static load management percentage

Switch off/on or configure Hybrid load management

The screenshot shows the CHARGERSync Essentials Operational portal interface. The top navigation bar includes 'Overview', 'Charging Site', 'User Management', and 'Charging Session'. The main content area is titled 'Charging Site>test site Delft>Charger'. It displays details for two chargers:

- Charger 1:** TACW1141420G0025, Alias/SN TACW1141420G0025, Connector Type 2, Power Supply Phase 1, Network 4G, Status Available, Derating 70%, Current 11.2A. The 'Hybrid Load Management' toggle is set to 'ON' and is highlighted with a red box. The 'Load Balance' slider is set to 70% and is highlighted with a yellow box.
- Charger 2:** TACW741320G0018, Alias/SN TACW741320G0018, Connector Type 2, Power Supply Phase 2, Network 4G, Status Available, Derating 100%, Current 32A.

The interface also shows a 'Remote Control' section with buttons for restart, stop, status details, and static load management. The 'Load Balance' section includes a manual load balance slider for TACW1141420G0025, ranging from 20% to 100%, with an 'OK' button.

# ChargerSync Essentials Operational portal - Charger Details

- Charger status
- list of Charging sessions
- Energy & Cost overview
- Session Details
- Charger status during charge session

**Charger Status**  
TACW741320G0018  
TACW741320G0018

Rated Current: 32A

Charging

32.1  
[A]

7.4  
[kW]

233,1  
[V]

**Load Balance**

20% 30% 40% 50% 60% 70% 80% 90% 100%

ⓘ Minimum 20%  
ⓘ Load balance in individual charging connector is not compatible in the station hybrid load management mode

OK

CHARGERSync | Overview | Charging Site | User Management | Charging Session

Site List ▾

Delft

Charger

Statistics

Hybrid Load Management

Charging Site>Delft>Charger information

**Charger Status** Idle

TAC2245019S0047  
High

Rated Current: 32A

0  
[A]

0  
[kW]

0  
[V]

**Load Balance**

20% 30% 40% 50% 60% 70% 80% 90% 100%

ⓘ Minimum 20%  
ⓘ Load balance in individual charging connector is not compatible in the station hybrid load management mode

OK

**Charging Session** More

Start Time	End Time	Energy Delivered	Duration	Total Cost	User Name
11/06/2020 11:00	11/06/2020 11:03	0,4kWh	02min	0,12(€)	3rd party card
19/05/2020 11:39	19/05/2020 12:32	0,06kWh	53min	0,02(€)	Eirini
19/05/2020 10:44	19/05/2020 10:48	0,59kWh	04min	0,18(€)	Eirini
18/05/2020 13:49	18/05/2020 13:49	0kWh	1min	0(€)	Eirini

**Energy & Cost Overview**

**0,12** EURO  
Revenue

**1** Charging Session

**0,4** kWh  
Energy Delivered

**0,04** hour  
Duration

Week | Month | Year

last updated 21 mins ago

Cost(€)

Energy Delivered(kWh)

■ cost ■ energy

**Session Detail**

Order Number: C20061109000521501 start Time: 11/06/2020 11:00 End Time: 11/06/2020 11:03

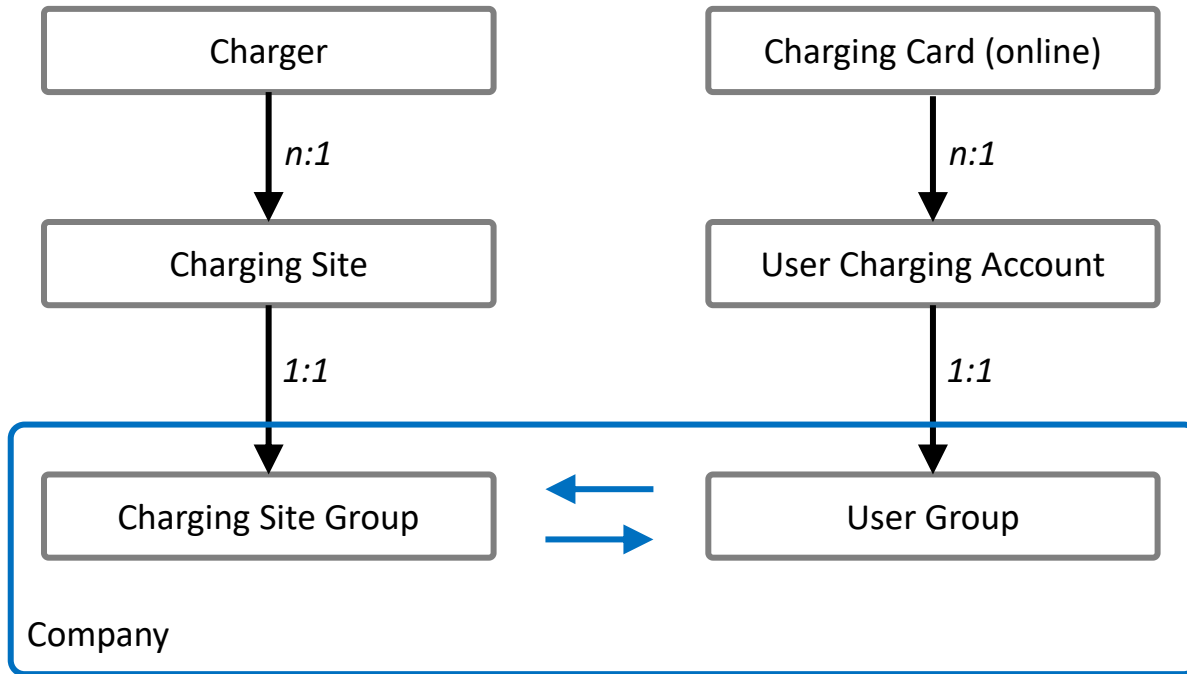
card.ElecCost:0,04      Service Cost:0,08      Total Cost:0,12

**Charging Curve**

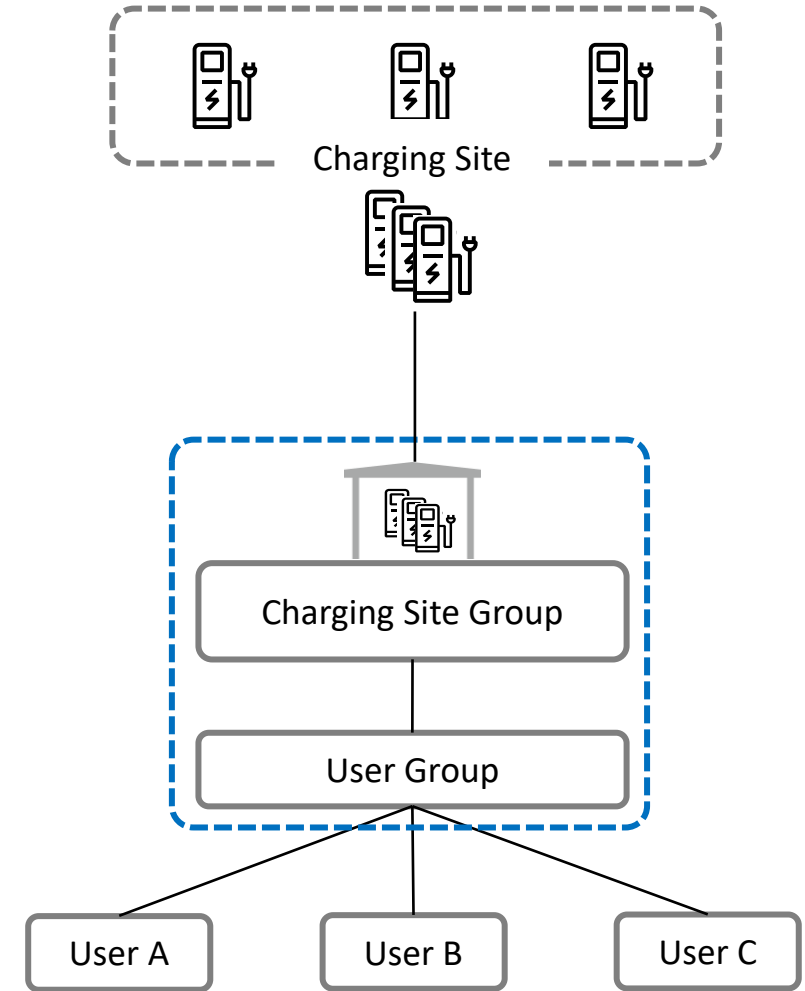
■ A ■ V

# ChargerSync Essentials Operational portal

## Relation between user group and site group



*When creating the company by default it creates the Charging Site Group and User Group*



# ChargerSync Essentials Operational portal - User Management

In User Management,  
[Charging Account management](#)  
account can be operated.

RFID card number



User details



Charging Account Management | Charging Card Management

User ID:  Account Status: All  User Name:  User Email:

NO.	User ID	User Email	User Name	Bound Cards	Account Status	Account Management
1	3059340550	christian.van-maurik@nl.abb.com	3rd party card	-	Not Frozen	



# ChargerSync Essentials Operational portal - User Management

In User Management,  
Charging card Account  
card balance can be  
operated.

User details

Balance

CHARGERSync Overview Charging Site User Management Charging Session Professional admin

Charging Account Management Charging Card Management

Created Time: Start date ~ End date Charing Card ID: Card Account Status: All

User Name: User Email: Card Status: All

Search

+ Add a New Charging Card

NO.	Charing Card ID	User Email	User Name	Card Account Status	Card Status	Created Time	Account Balance	Balance Management	Card Management
1	3059340550	christian.van-maurik@nl.abb.com	3rd party card	Not Frozen	Activated	11/06/2020 16:59	19.88(€)	Top Up Withdraw	Activate

# ChargerSync Essentials Operational portal - Charging session

List of sessions

Details per session

Session charge curve

The screenshot displays the 'Charging Session' page in the ChargerSync Essentials Operational portal. The page is divided into three main sections:

- Summary and List of Sessions:** At the top, there are summary statistics: 53 Total Charging Sessions, 21h08min Total Duration, 146,22unit.energ Total Energy Delivered, and 39,78(unit.mone) Total Cost. Below this is a table listing individual sessions.
- Session Detail:** A detailed view of a specific session (ID: C2006081610000981) is shown, including charger information (SN: TAC2244919G0022, Connector Type, Power Supply Phase, Rated Output Power: 22kW), billing information (User Name: Eirini, User ID: 20030602, Start/End Time: 08/06/2020 18:09 to 18:24, Energy Delivered: 4,87kWh), and charges (Electricity Charge: 0,49€, Service Charge: 0,97€, Total: 1,46€).
- Charging Curve:** A line graph showing the charging curve for the selected session. The Y-axis represents current (A) and voltage (V), ranging from 0 to 40. The X-axis represents time from 16:11 to 16:21. The graph shows a steady current of approximately 30A and a voltage of approximately 230V.

NO.	Session ID	Charger Alias/SN	Start Time	End Time	Duration	Energy Delivered	Total Cost	Session Status	User Name	Details
1	C20061109000521501	TAC2245019S0047	11/06/2020 11:00	11/06/2020 11:03	00h02min26s	0.402kwh	0.12(€)	Paid	3rd party card	>
2	C2006081610000981	TAC2244919G0022	08/06/2020 18:09	08/06/2020 18:24	00h14min09s	4.873kwh	1.46(€)	Paid	Eirini	∨

**ABB**