



JUNE 2020

# Terra AC: ChargerSync App & Essentials Operational portal

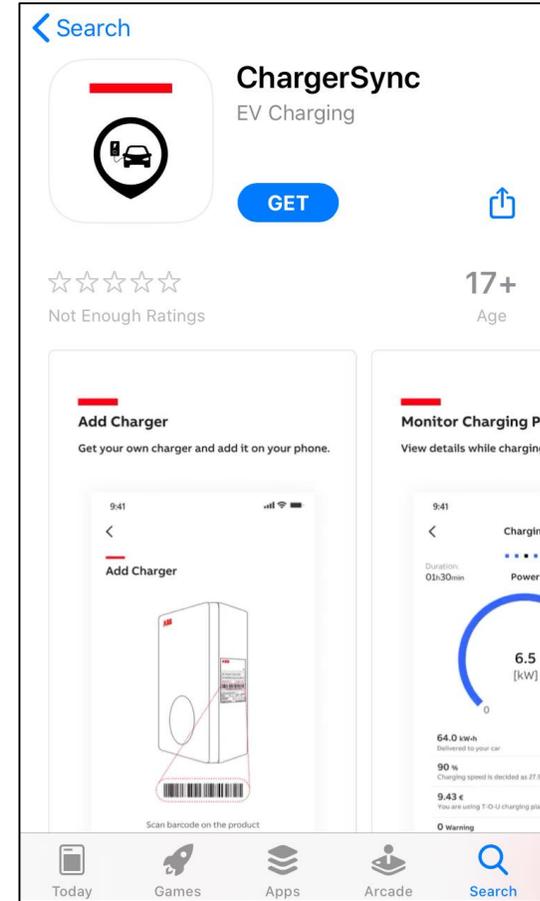
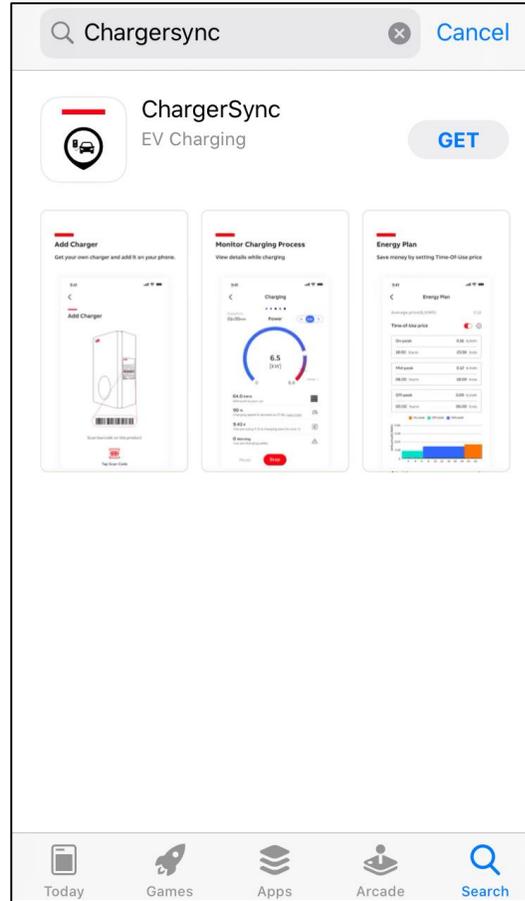
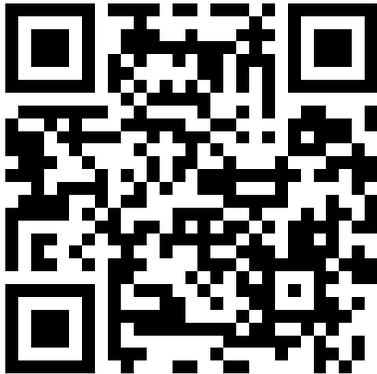
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**App**

# 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)*

CHARGERSync English

## Log in

E-mail address

Password

Forgot your password?

Login

Need an account? [Sign up](#)

CHARGERSync English

## Create Account

Christian

Christian.van-maurik@nl.abb.com

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

Continue

CHARGERSync English

## Thank you!

We have sent you an email to confirm your account.

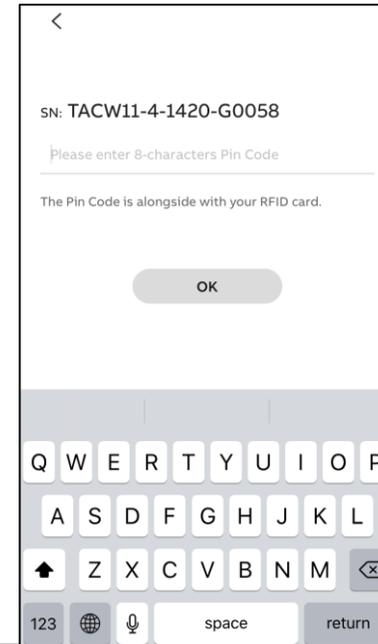
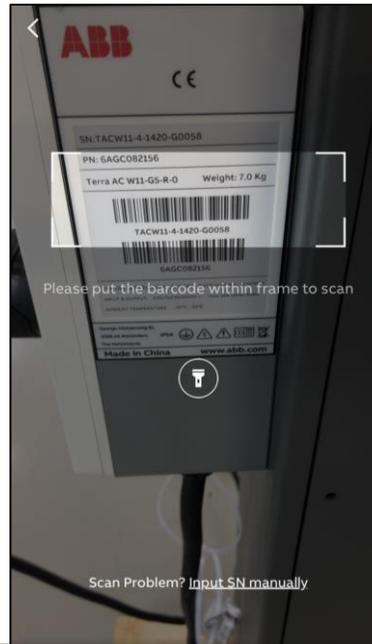
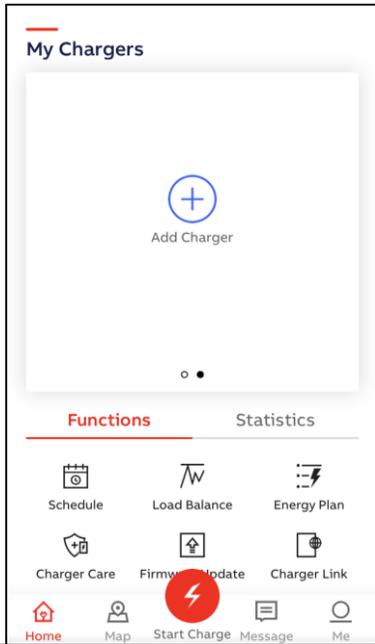
OK

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

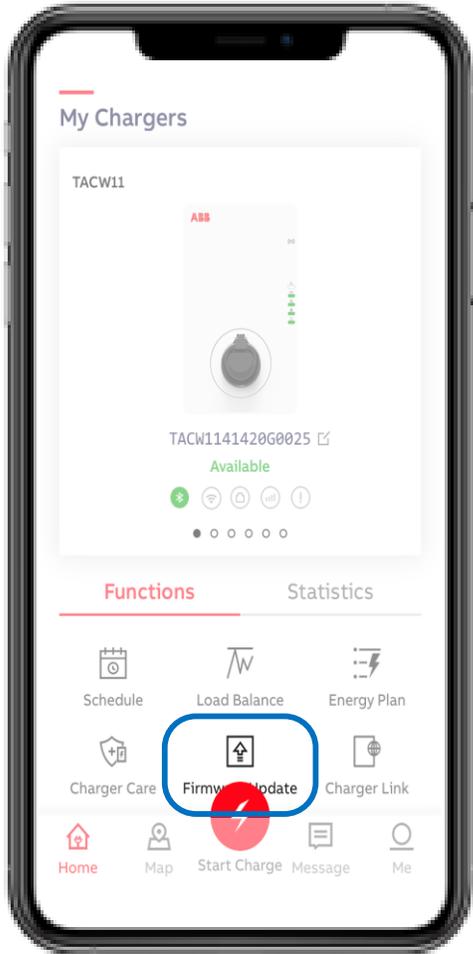
# Add Terra AC to your account

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.

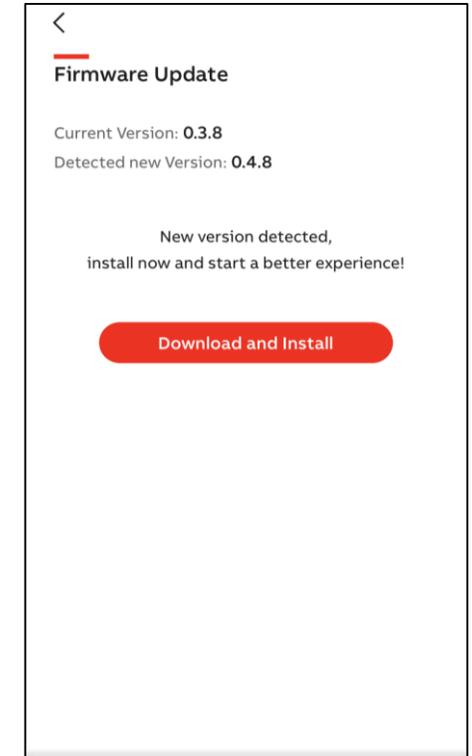
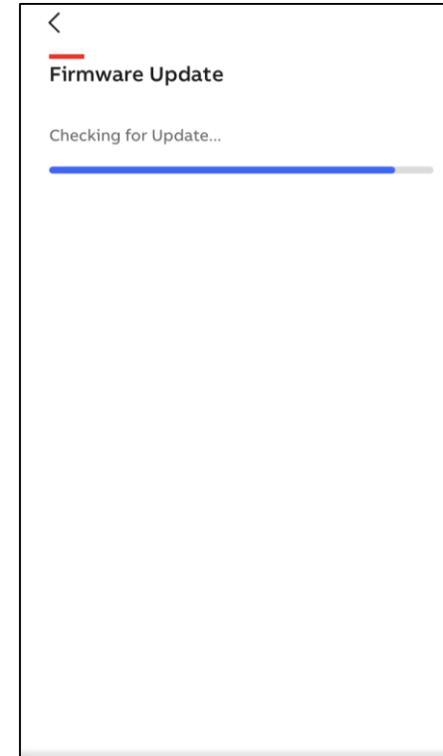


# Home screen – Firmware Update

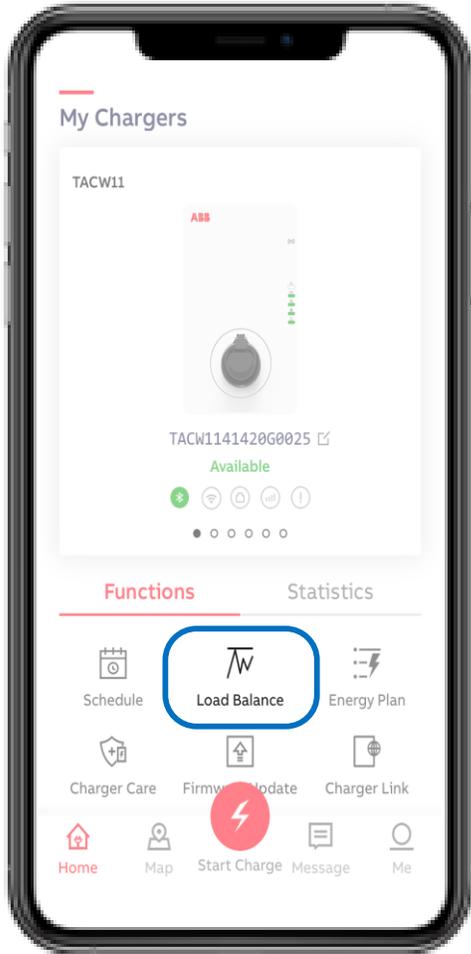


Update charger firmware to latest available version

- 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



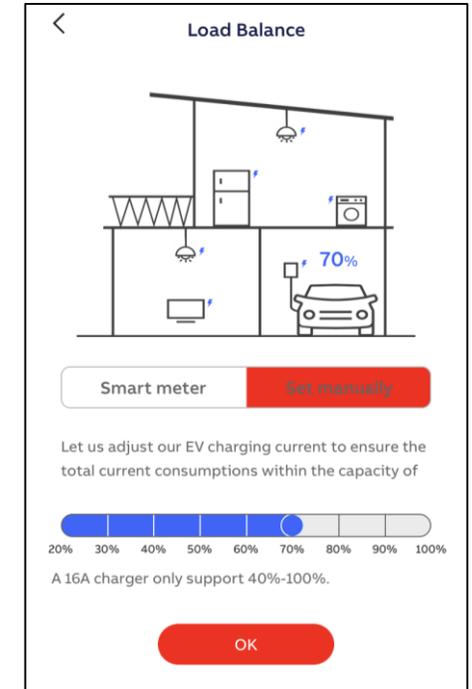
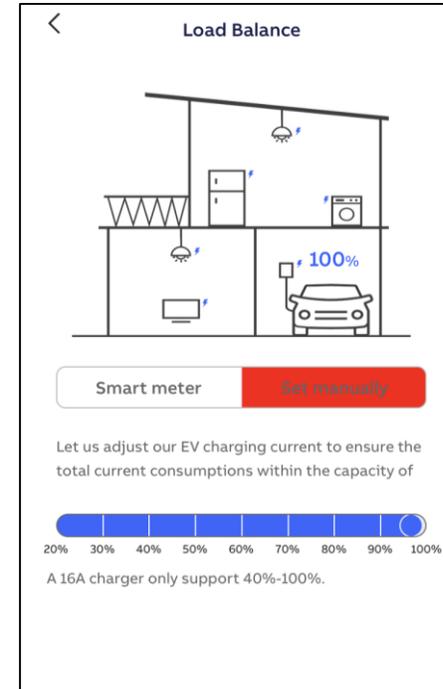
# Home screen – Static Load Balance



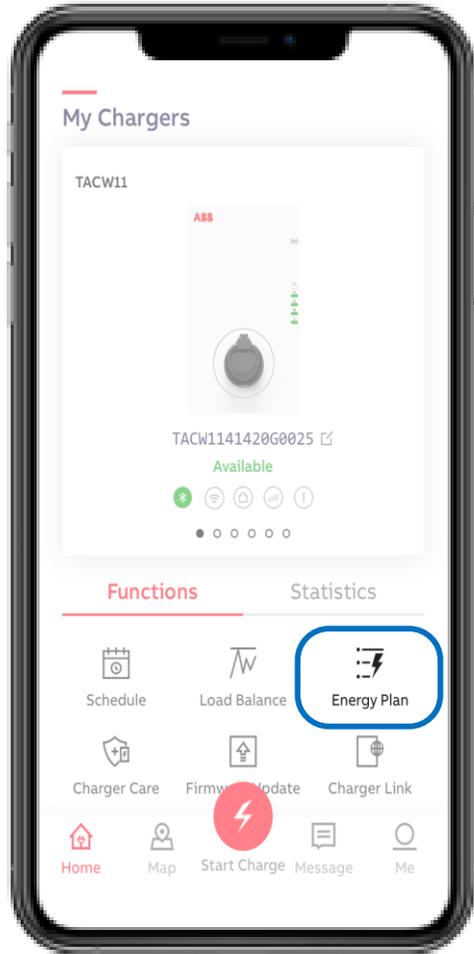
With Load Balance a user selected power limit can be set. The option 'Set manually' is ready pre-selected. The option 'Smart meter' will be released later.

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

*To limit energy costs in peak energy period.*

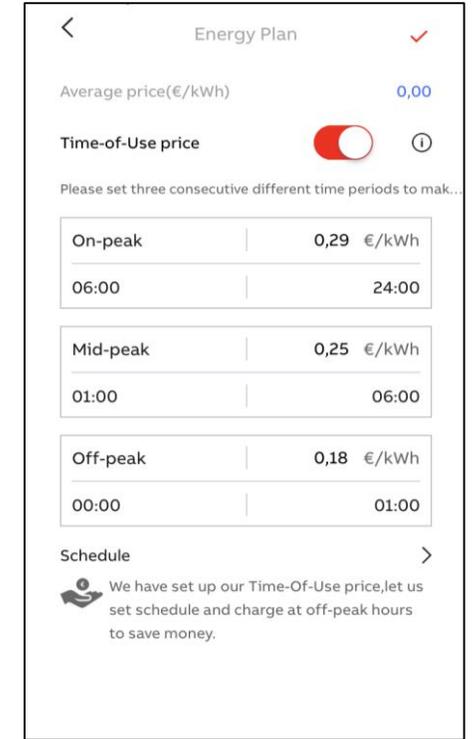


# Home screen – Energy Plan

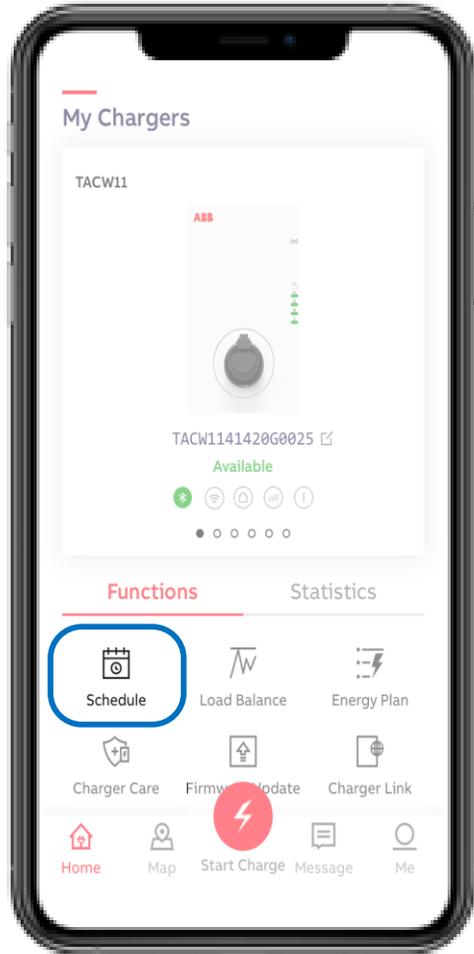


With Energy Plan price per kWh can be set and can be used for own energy monitoring.

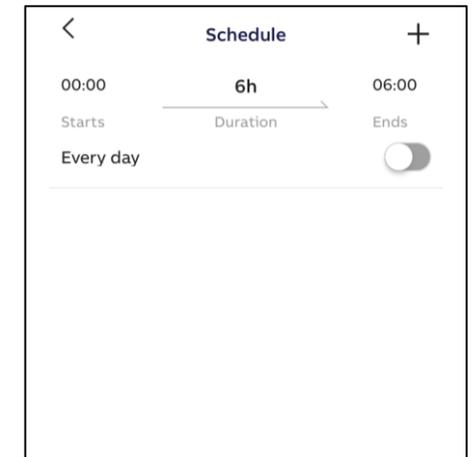
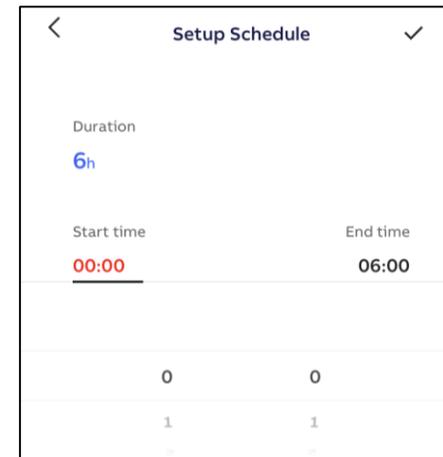
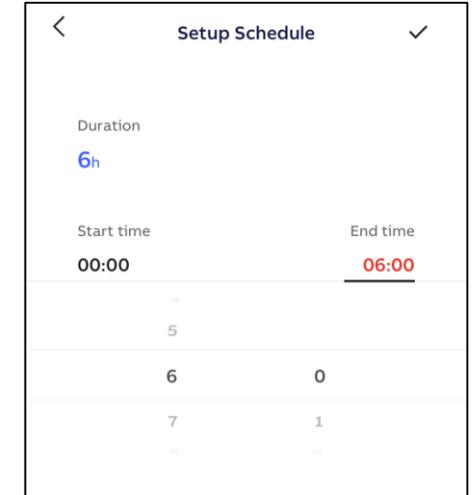
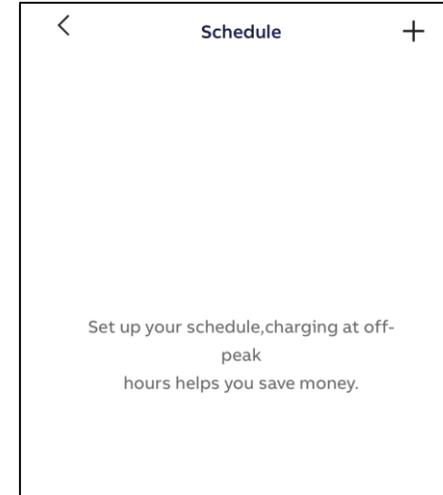
*Different currency and time of use prices will be released later.*



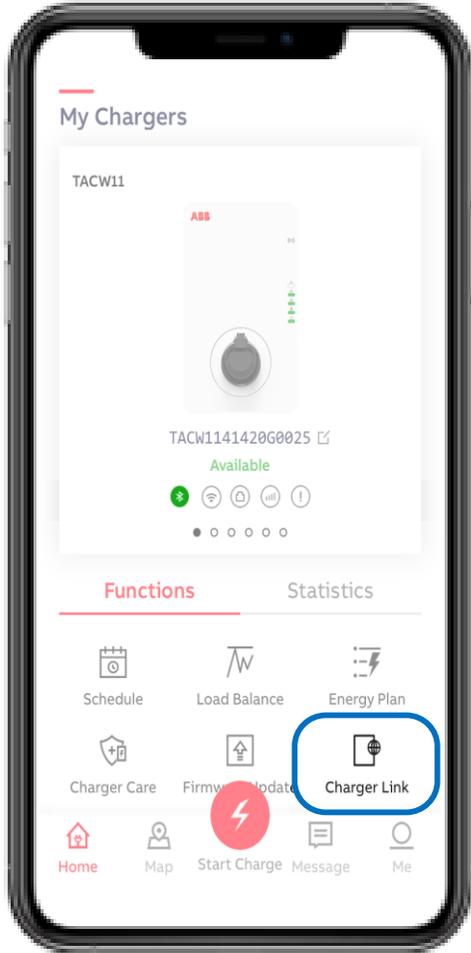
# Home screen – Schedule



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)

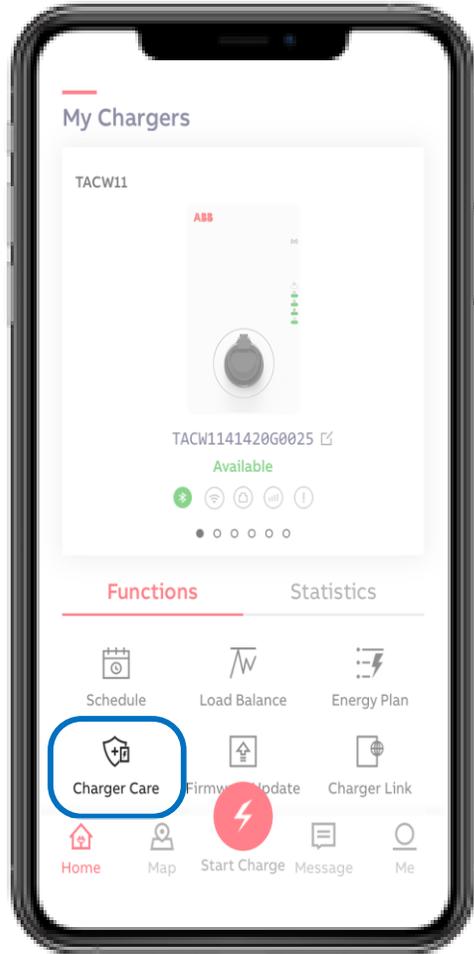


WIFI = settings can be configured via Terra Config App



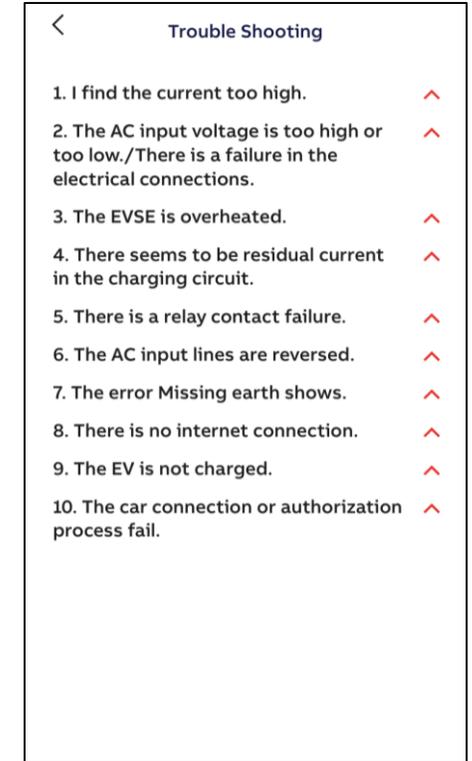
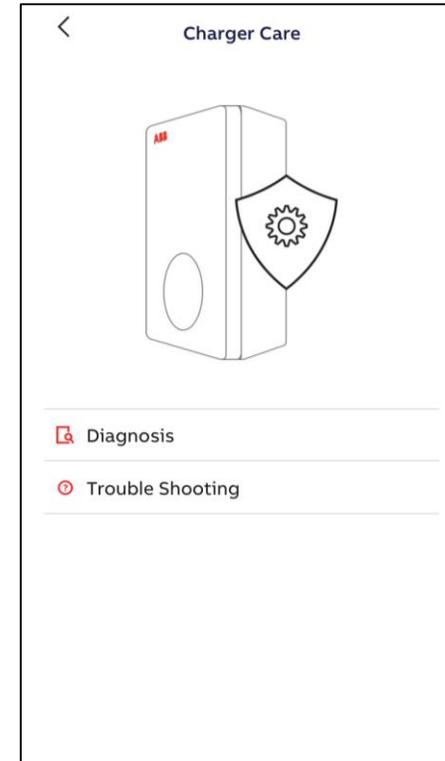
4G = certain (nano) sim cards work automatically or can otherwise configured via Terra Config App

# Home screen – Charger Care

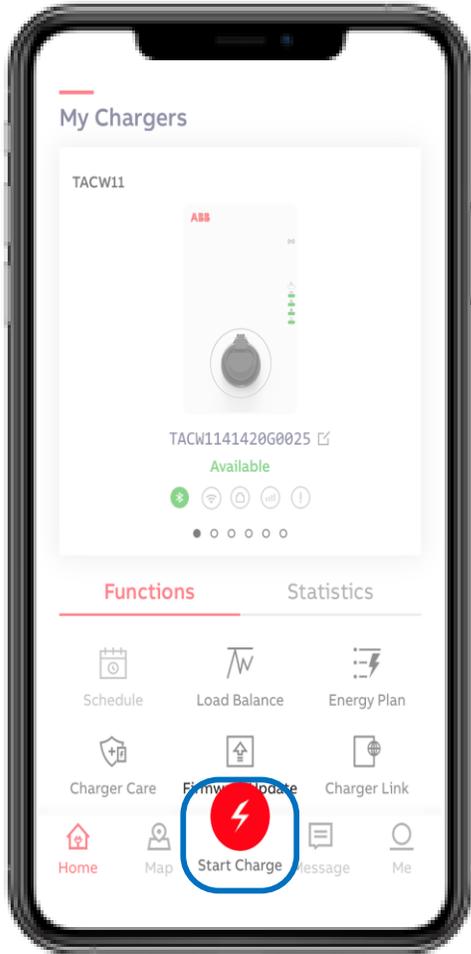


Basic Trouble Shooting guide for the EV driver can be in Charger Care.

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

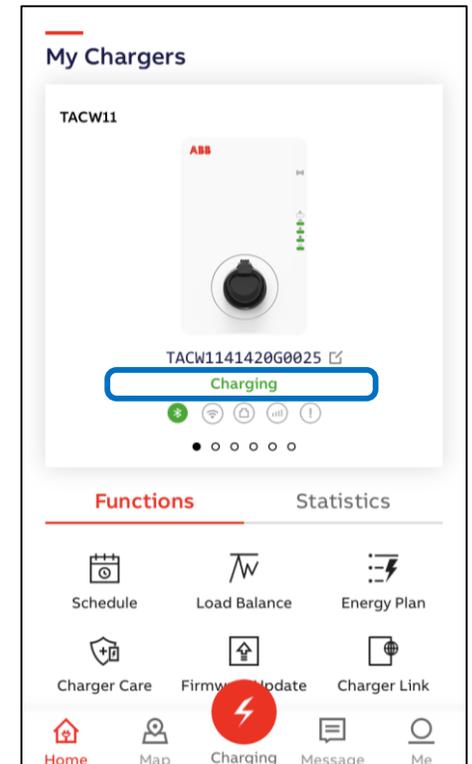
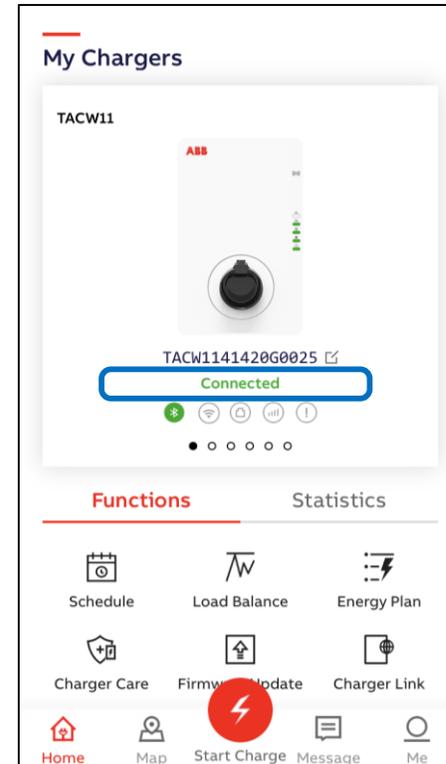


# Home screen – Start – Charging



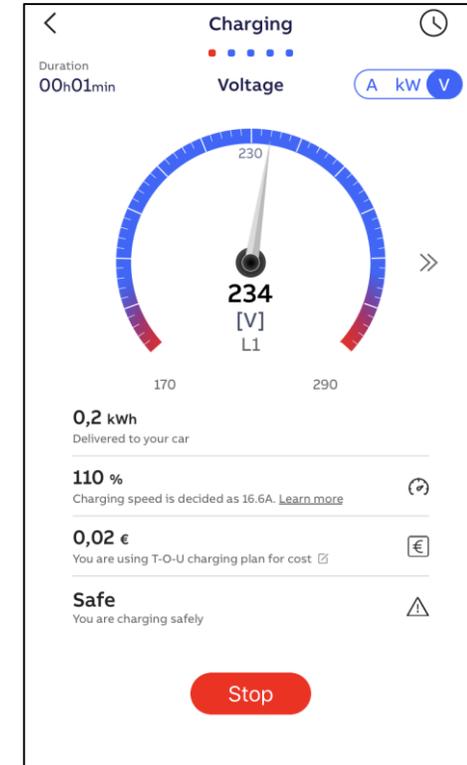
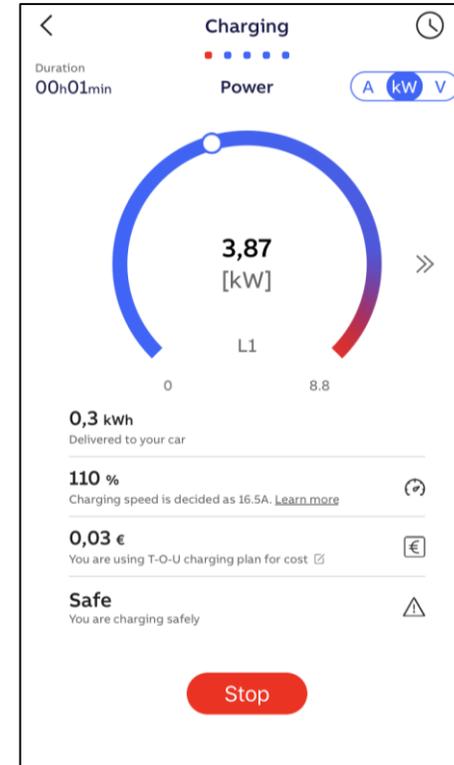
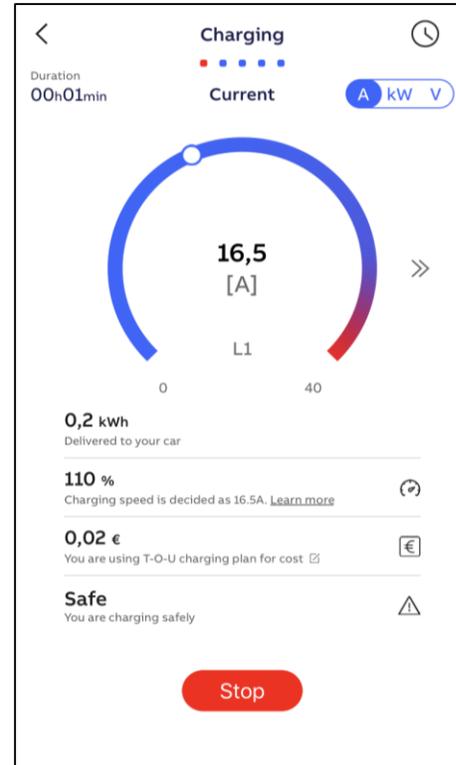
When connecting the charger to the EV the status message bar will change from 'Available' to 'Connected'.

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'.



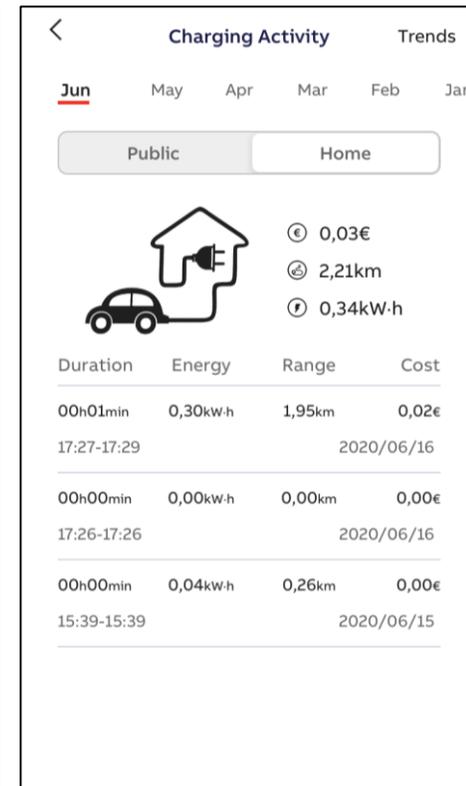
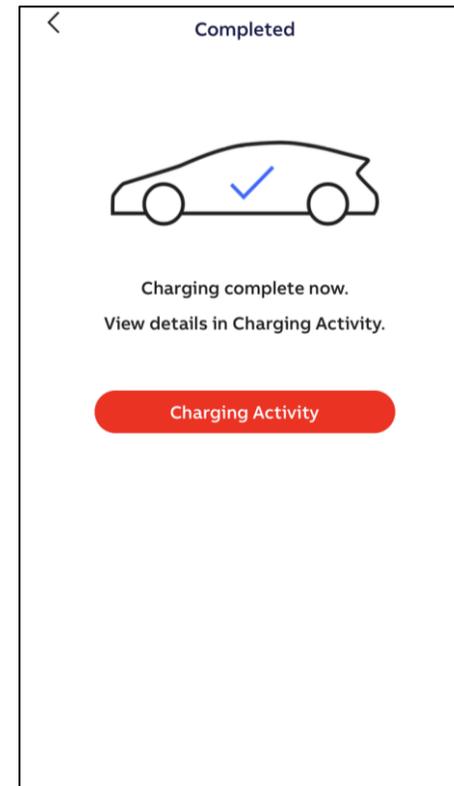
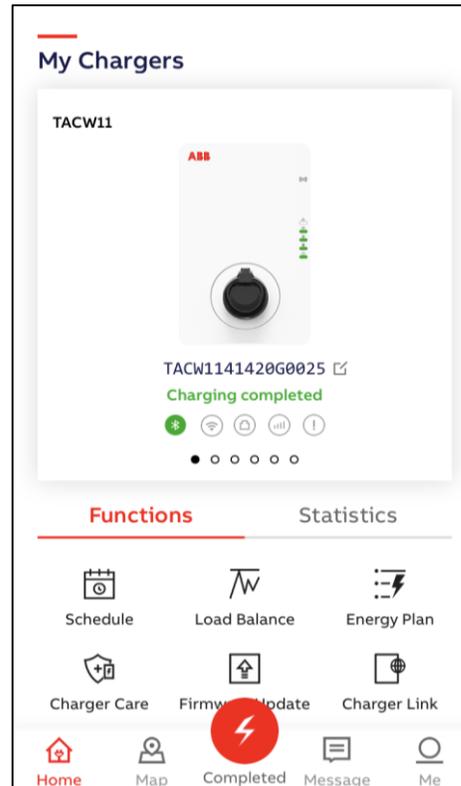
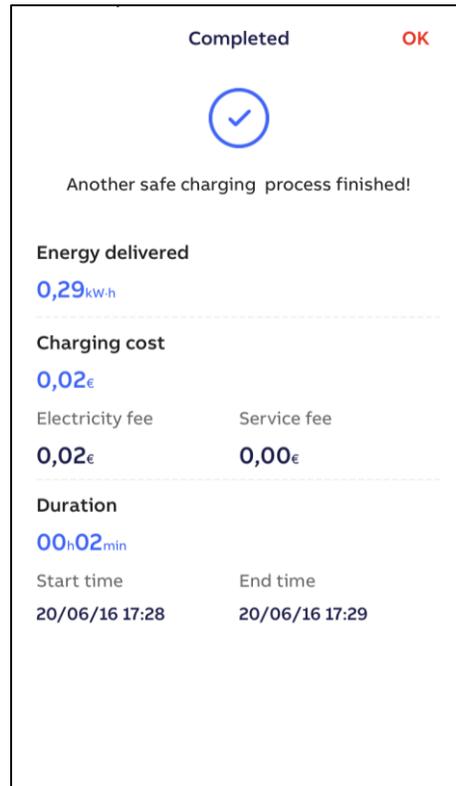
# Charging monitoring data

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

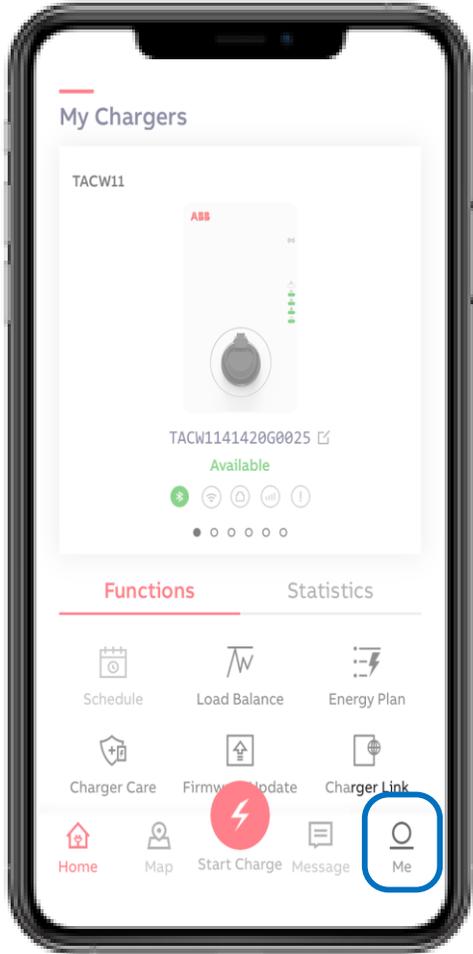


# Charging Complete

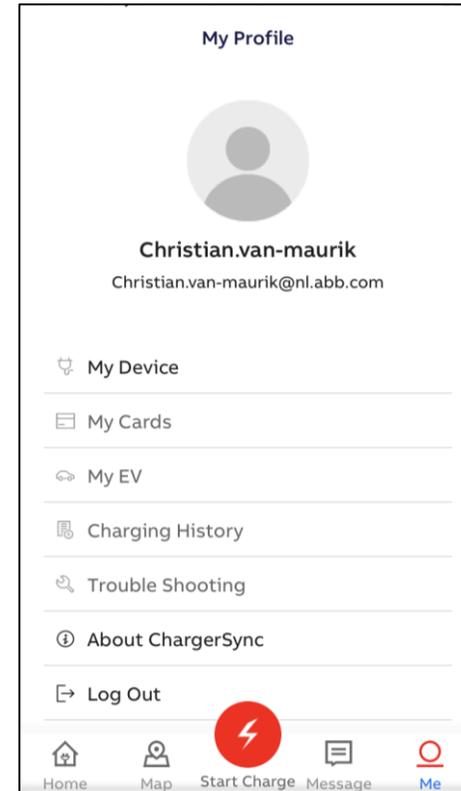
To Stop the charge session can be done via the red 'stop' button. Status bar will change in 'Charging complete'. Charge session details will be showed in 'Completed'. All Charge sessions can be found with 'Charging Activity'.



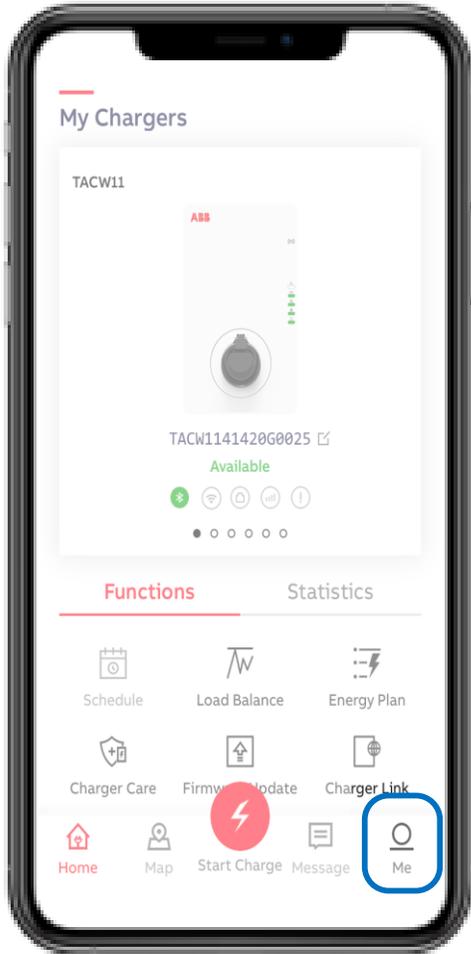
# Home screen – Me – User Account



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.

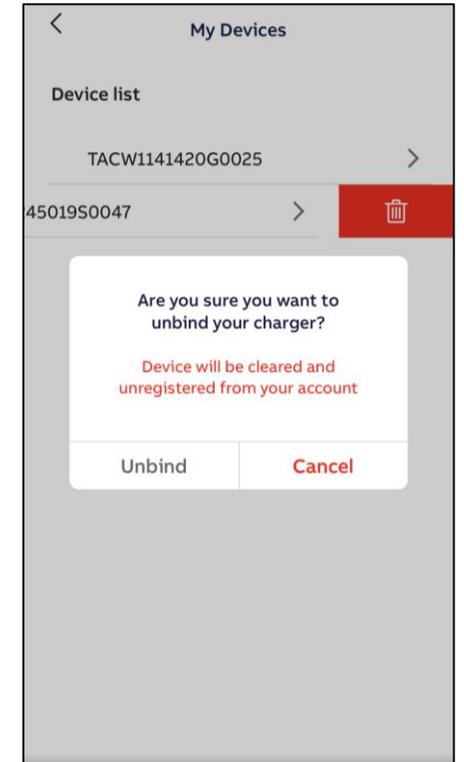
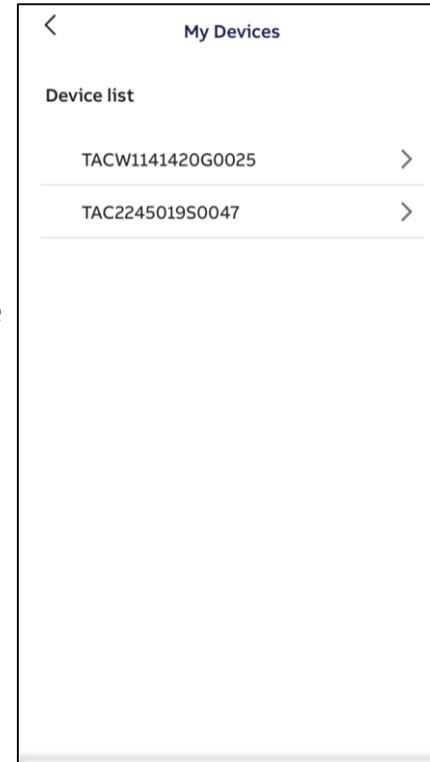
(Authentication via PIN code)

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

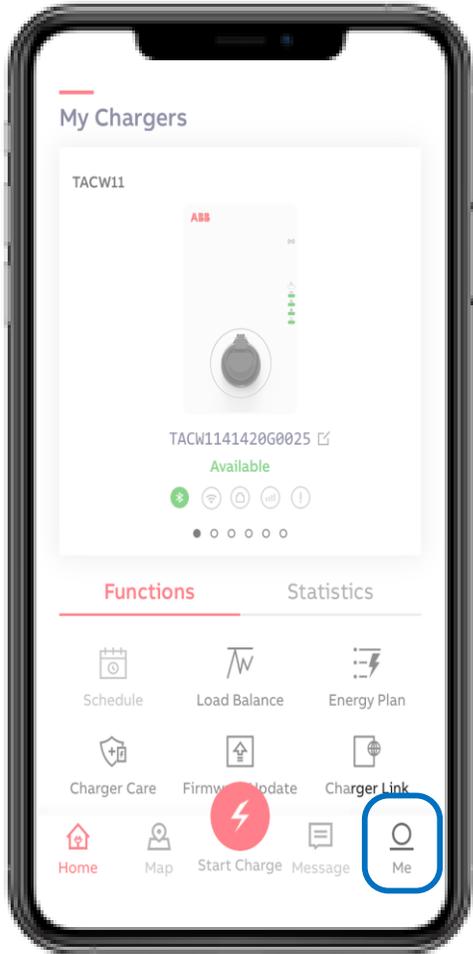
Slide the device from right to left and use the red delete bin to open the unbind option.

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

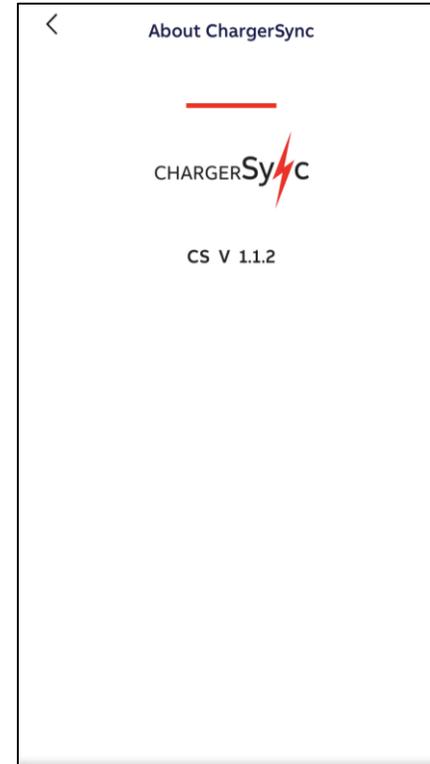
**Note:**  
the owner of the PIN code is the owner of the Charger



# Home screen – Me – Charger Sync App version



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

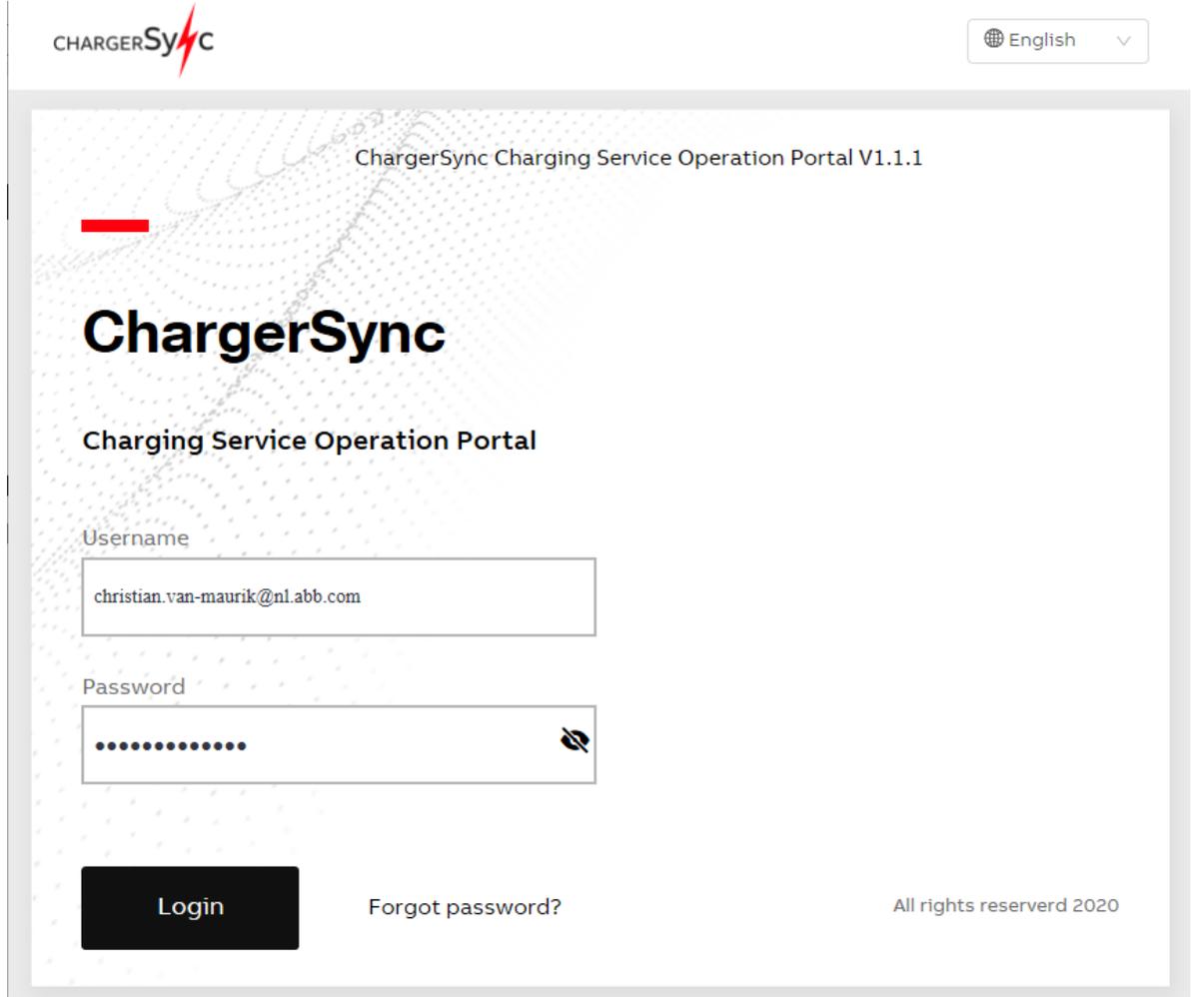


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# Portal

# ChargerSync Essentials Operational portal

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.



The screenshot shows the login interface for the ChargerSync Charging Service Operation Portal V1.1.1. At the top left is the CHARGERSync logo, and at the top right is a language selection dropdown set to 'English'. The main heading is 'ChargerSync' with the subtitle 'Charging Service Operation Portal'. Below this are two input fields: 'Username' containing 'christian.van-maurik@nl.abb.com' and 'Password' with masked characters and a visibility toggle icon. A black 'Login' button is positioned below the password field. To the right of the button is a 'Forgot password?' link. At the bottom right, it says 'All rights reserved 2020'.

# 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 displays the CHARGERSync Essentials 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 with 'test site Delft'. The main content area shows the configuration for a specific charger at 'test site Delft' (Heertjeslaan, 2629 JD Delft, Netherlands). Key features highlighted with colored boxes include:

- Hybrid Load Management:** A red box highlights the 'Hybrid Load Management' toggle switch, which is currently set to 'ON'.
- Network Connectivity:** A blue box highlights the network status icons (4G, Wi-Fi, Ethernet) for the first charger.
- Remote Control:** A green box highlights the remote control buttons (stop, restart, status, etc.) for the first charger.
- Load Balance:** A yellow box highlights the 'Load Balance' slider, which is set to 70% for the first charger.

NO.	Alias/SN	Connector	Phase	Network	Status	Derating	Current	Remote Control
1	TACW1141420G0025 TACW1141420G0025			4G	Available	70%	11.2A	
2	TACW741320G0018 TACW741320G0018			4G	Available	100%	32A	

# 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**  
TAC224501950047  
High  
Rated Current: 32A

Idle

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(€)	Elirini
19/05/2020 10:44	19/05/2020 10:48	0,59kWh	04min	0,18(€)	Elirini
18/05/2020 13:49	18/05/2020 13:49	0kWh	1min	0(€)	Elirini

**Energy & Cost Overview**

0,12 EURO Revenue

0,4 kWh Energy Delivered

1 Charging Session

0,04 hour Duration

Week | Month | Year

last updated 21 mins ago

Cost(€)

Energy Delivered(kWh)

**Session Detail**

More

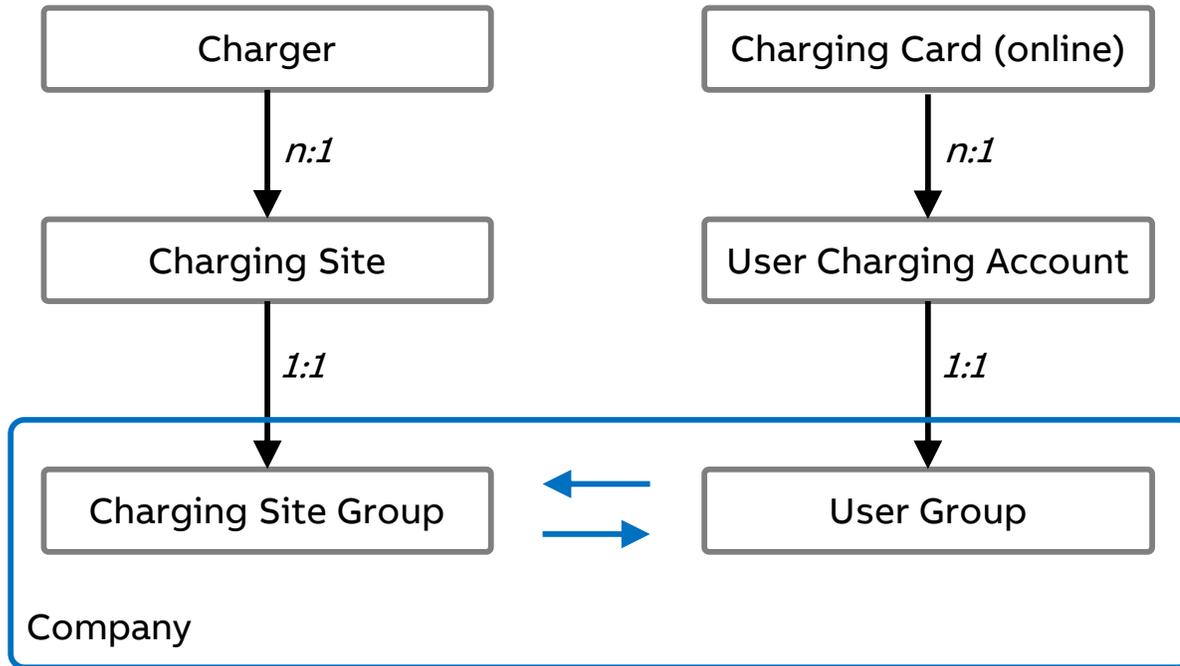
Order Number:C20061109000521501start Time:11/06/2020 11:00 End Time:11/06/2020 11:03  
card.ElecCost:0,04 Service Cost:0,08 Total Cost:0,12

**Charging Curve**

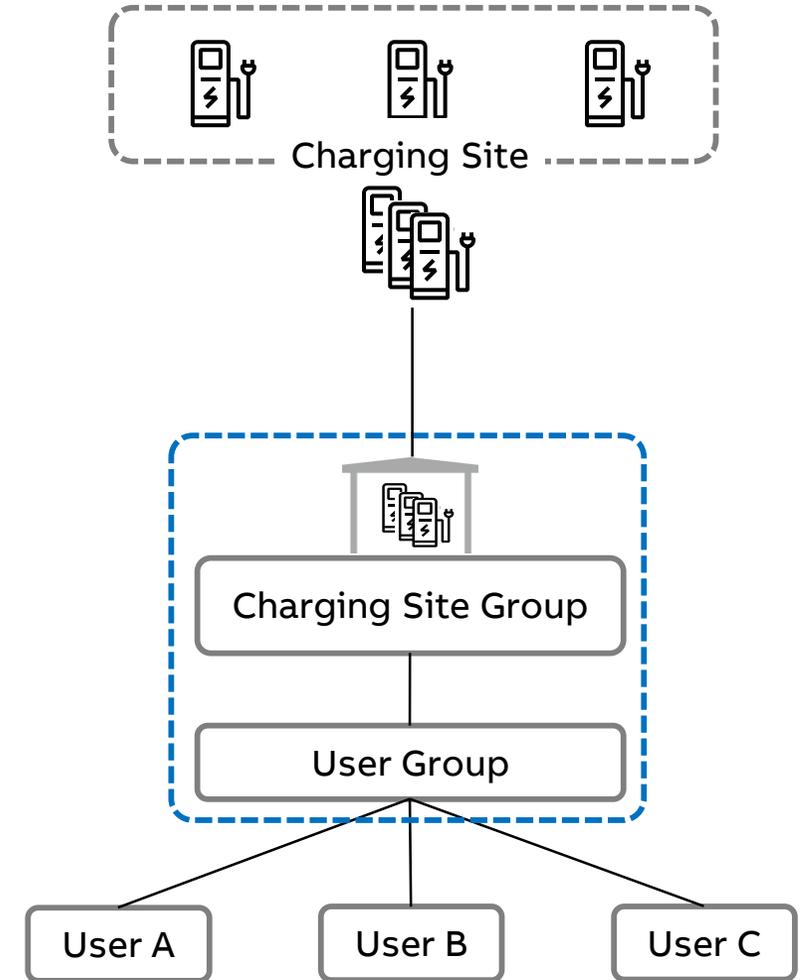
■ A ■ V

# 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:  User Name:  User Email:

NO.	User ID	User Email	User Name	Bound Cards	Account Status	Account Management
1	3059340550	[REDACTED]	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

The screenshot displays the 'User Management' section of the ChargerSync Essentials Operational portal. The top navigation bar includes 'Overview', 'Charging Site', 'User Management', and 'Charging Session'. The 'User Management' tab is active. Below the navigation, there are two tabs: 'Charging Account Management' and 'Charging Card Management'. The 'Charging Card Management' tab is selected. The search form contains the following fields: 'Created Time' (with 'Start date' and 'End date' sub-fields), 'Charing Card ID', 'Card Account Status' (dropdown menu), 'User Name', 'User Email', and 'Card Status' (dropdown menu). A red 'Search' button is located below the search form. Below the search form, there is a button labeled 'Add a New Charging Card'. The table below the search form has the following columns: 'NO.', 'Charing Card ID', 'User Email', 'User Name', 'Card Account Status', 'Card Status', 'Created Time', 'Account Balance', 'Balance Management', and 'Card Management'. The table contains one row of data. The 'User Email' and 'Account Balance' columns in this row are highlighted with blue and green boxes respectively. The 'Balance Management' column contains two buttons: 'Top Up' (green) and 'Withdraw' (red). The 'Card Management' column contains three buttons: 'Activate' (grey), 'Deactivate' (grey), and 'Refresh' (green).

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 Deactivate Refresh

# 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 Cards:** Located at the top, these cards provide key statistics:
  - Total Charging Session: 53
  - Total Duration: 21h08min
  - Total Energy Delivered: 146,22unit.energ
  - Total Cost: 39,78(unit.mone)
- Table of Sessions:** A table listing individual charging sessions with columns for NO., Session ID, Charger Alias/SN, Start Time, End Time, Duration, Energy Delivered, Total Cost, Session Status, User Name, and Details. Two sessions are visible:
 

NO.	Session ID	Charger Alias/SN	Start Time	End Time	Duration	Energy Delivered	Total Cost	Session Status	User Name	Details
1	C20061109000521501	TAC224501950047	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	∨
- Session Detail (Green Box):** Provides a comprehensive view of a specific session (ID: C2006081610000981).
  - Charger Info:** SN: TAC2244919G0022, Connector Type: [Icon], Power Supply Phase: [Icon], Rated Output Power: 22kw.
  - Other Info:** Alias: Medium, Latest Session: [Blank], Charging Site: Delft.
  - Billing Info:** User Name: Eirini, User ID: 20030602, Start: 08/06/2020 18:09, Stop: 08/06/2020 18:24, Duration: 14min, Energy: 4,87kwh. Status: Fully charged or unplug.
  - Costs:** Electricity Charge: 0,49€, Service Charge: 0,97€, Total: 1,46€.
- Charging Curve (Yellow Box):** A line graph showing the charging current (A) and voltage (V) over time. The x-axis represents time from 16:11 to 16:21. The y-axis represents current/voltage from 0 to 40. The current (red line) remains constant at approximately 30A, and the voltage (blue line) remains constant at approximately 230V.

**ABB**