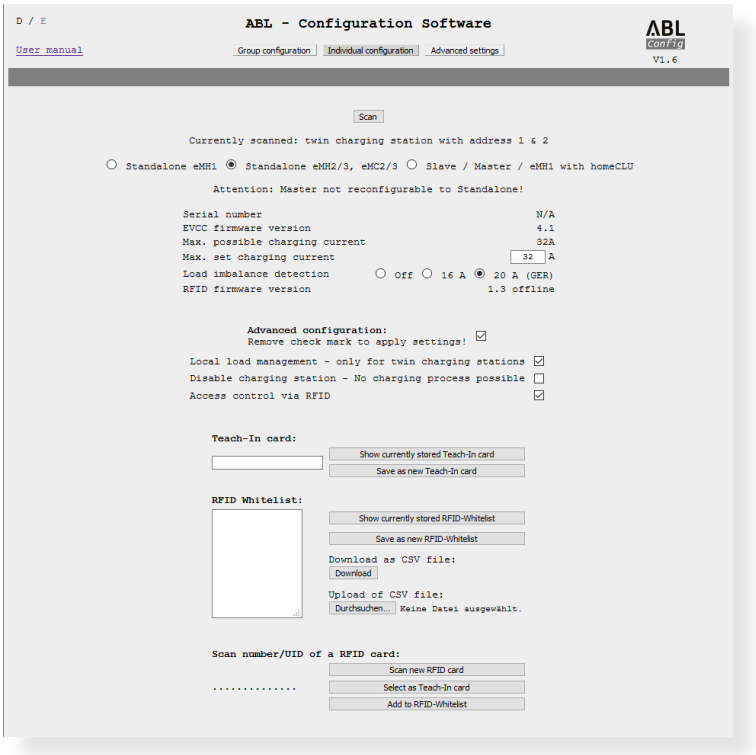


ABL – Configuration Software

Contents

EN

Article No.: 0302000_E_a

Intended use

The ABL – Configuration Software v1.6 application is intended for preparing and setting up all ABL charging stations for use in a group installation or as a single charging station (stand-alone).

- All working steps for mechanical and electrical installation as well as commissioning of the charging stations must be completed before the software configuration described in this manual.

Information in this document

This document describes how to set up the bus addresses of the ABL charging stations using the ABL – Configuration Software v1.6: It is recommended that all working steps described in this document are carried out by a qualified specialist electrical contractor only.

	User	Specialist electrical contractor
Software manual (this document)	✗	✓
Additional technical information		
■ Data sheets	✓	✓
■ Operating manual	✓	✓
■ Installation manual	✗	✓

Additional technical information

Additional technical information is required for the installation, commissioning and operation of the charging stations. This is contained in separate documents.

In addition, the technical data for your charging stations are collated in product-specific data sheets. You can download these documents from the ABL website using the following link:

https://www.ablmobility.de/en/service/downloads.php

General

This manual describes all working steps required to install and/or operate the product it concerns.

Certain sections of this manual are specially formatted for quick and easy reference.

- Descriptions listing equally valid options are indicated by bullet points.

1 Descriptions listing operating steps are numbered in chronological order.

NOTE

Changes to functions and design features

Please note that all technical details, specifications and design characteristics of the product may be changed without prior notice.

Introducing the ABL – Configuration Software v1.6

The ABL – Configuration Software v1.6 is an application to prepare ABL charging stations for use in a group installation or stand-alone operation. It allows for a simplified set-up of the following functions for group and individual configurations:

Group configuration (→ page 5)

- Automatic allocation of the bus addresses for the charge controller, the energy meter (for each charge point) and the RFID module of the charging station
- Only for charging stations that comply with weights and measures legislation: Automatic allocation of the LGW address (logging gateway, compliance module, only relevant for Germany)
- Manual allocation or change of bus addresses
- Setting up a maximum current and activating load imbalance detection for all charge points in a group installation

Individual configuration (→page 10)

- Set-up for stand-alone operation of a Slave charging station
- Setting up a maximum current and activating load imbalance detection
- (De)activating the internal load management
- (De)activating the RFID access restriction
- Management of RFID cards
- Enabling/locking the charging station

Advanced settings (→ page 17)

For a successful configuration, the preconditions listed in the following sections must be fulfilled. In particular, error-free communication between the set-up computer and the charging stations is required. If no connection can be established, the ABL – Configuration Software v1.6 offers the possibility to check and reallocate the computer's COM ports that are used for communication.

Integrated manual for simplified operation

To simplify operation and set-up, the ABL – Configuration Software v1.6 offers an integrated quick start guide that chronologically lists all necessary or possible working steps on the interface.

- Follow these steps to correctly set up your group or a single charging station.
- These detailed instructions can be downloaded locally to your computer at any time via the Operating manual link in the header of the ABL – Configuration Software v1.6 .

Language support

The ABL – Configuration Software v1.6 is available in German and English. Use the D / E selection in the header of the software to switch between these user languages. The link to the operating manual will direct to either the German or English version of this document, depending on which language is selected.

Redirecting to the ABL website

Use the ABL config button on the right of the software header to go to the ABL website at any time to find out more about the product range or to access the additional technical information in the Service > All downloads area.

Progress bar display

The progress bar at the bottom of the header shows the status of the current action. Always wait until the bar has reached the right-hand side and the current action has been completed before carrying out the next working step.

Preconditions for set-up using the ABL – Configuration Software

The following preconditions apply when setting up using the ABL – Configuration Software v1.6:

- You will need a computer/laptop with Windows 10 and at least one free USB port, as well as an Internet connection.
- A VCP (Virtual COM Port) driver must first be installed on the computer for communication with the charging station. You can download the driver as follows:
  - From the manufacturer's website: www.ftdichip.com > Drivers > VCP Drivers
    - » Select the appropriate driver for your computer's operating system (→ Version 2.12.28).
    - » Click the setup executable link in the Comments column to install the driver automatically.

		Processor Architecture							
Operating System	Release Date	X86 (32-bit)	X64 (64-bit)	PPC	ARM	MIPSII	MIPSIV	SH4	Comments
Windows*	2017–08-30	2.12.28	2.12.28	–	–	–	–	–	WHQL Certified. Includes VCP and D2XX. Available as a setup executable Please read the Release Notes and Installation Guides.
Linux	–	–	–	–	–	–	–	–	All FTDI devices now supported in Ubuntu 11.10, kernel 3.0.0-19 Refer to TN-101 if you need a custom VCP VID/PID in Linux VCP drivers are integrated into the kernel.
Mac OS X 10.3 to 10.8	2012-08-10	2.2.18	2.2.18	2.2.18	–	–	–	–	Refer to TN-105 if you need a custom VCP VID/PID in MAC OS
Mac OS X 10.9 and above	2019–12–24	–	2.4.4	–	–	–	–	–	This driver is signed by Apple
Windows CE 4.2-5.2**	2012-01-06	1.1.0.20	–	–	1.1.0.20	1.1.0.10	1.1.0.10	1.1.0.10	

  - From the website www.ablmobility.de/en/ in the section Service > All downloads > Software
  - Via the link on the Advanced settings page in the ABL – Configuration Software v1.6, see page 17

NOTE

Third-party software

As the VCP driver is a third-party software, ABL cannot guarantee the correct functionality of the driver or that it is up to date.

- You also need to install the ABL – Configuration Software v1.6. You can download the installation program from the website www.ablmobility.de/en/ in the section Service > All downloads > Software.
- For communication purposes, the Modbus interface of the charging station must be wired to a USB port on the computer via the Configuration Cable CONFCAB.
  - Information on the CONFCAB can be found via the Product search on the ABL website.
  - Information on wiring can be found in the information sheet Connecting the Configuration Cable, which is available in the installation folder of the ABL – Configuration Software v1.6 after unzipping.
    - » If communication cannot be established despite correct wiring, you can check the allocation of the computer's COM ports and reallocate them if necessary via the Advanced settings tab in the ABL – Configuration Software v1.6 (see "Advanced settings" on page 17).
- All charging stations must be connected to the electric grid and supplied with voltage.

NOTE

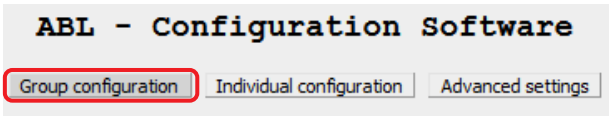
Internet connection

Please note that the computer you are using for the configuration must be connected to the Internet in order to download all necessary drivers and software applications.

However, an Internet connection is not required when subsequently setting up the charging stations via the ABL – Configuration Software v1.6!

Setting up a group installation

To prepare your charging stations for operation in a group installation, click the **Group configuration** button.



The Group configuration page allows you to search the individual data buses. The addresses detected in the buses are then automatically entered and managed in the address matrix shown below.

ADDRESS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TYPE																
EVCC																
RFID																
LGW																
METER																
SERIALNUM																

The matrix offers a separate address line for each relevant piece of information in the data buses:

- Type

  The number of charge points is shown here.
  - A charging station with one charge point (**Single**) occupies one column in the address matrix.
  - A charging station with two charge points (**Twin**) occupies two columns in the address matrix.

- EVCC

  The address value of the charge controller is shown here.
  - By default, a Master charging station is preset to **1** (**Single**, one charge point) or **1** & **2** (**Twin**, two charge points).
  - By default, a Slave charging station is preset to **3** (**Single**, one charge point) or **3** & **4** (**Twin**, two charge points).

- RFID

  The address value of the RFID module in the charging station is shown here.
  - A Master charging station is preset to **1** by default.
  - A Slave charging station is preset to **3** by default.

- LGW (only for charging stations that comply with calibration law)

  The address value of the compliance module (Logging Gateway, LGW) in the charging station is shown here. This address value is only displayed for charging stations that comply with calibration law.
  - A Master charging station is preset to **100** by default.
  - A Slave charging station is preset to **102** by default.

- Meter

The address value of the energy meter is shown here.
- By default, a Master charging station is preset to **1** (**Single**, one energy meter) or **1** & **2** (**Twin**, two energy meters).
- By default, a Slave charging station is preset to **3** (**Single**, one energy meter) or **3** & **4** (**Twin**, two energy meters).

- SERIALNUM

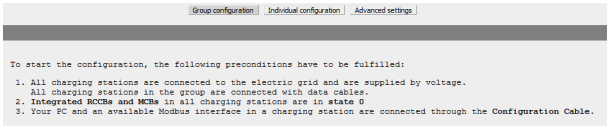
The serial number of the charging station is shown here, provided it is stored in the charge controller. For older models whose serial number is not yet recorded in the EVCC, N/A is shown instead.

Set-up via automatic addressing

The following working steps are available as a video: → **Installation videos**

To prepare your charging stations for operation in a group installation, proceed as follows:

1 Make sure that the preconditions shown on the interface are fulfilled.

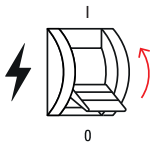


2 Click the **Continue** button.

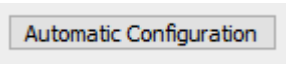
- The interface for allocating the bus addresses is then displayed.

3 Set the MCB and RCCB of the last Slave charging station to position **I**.

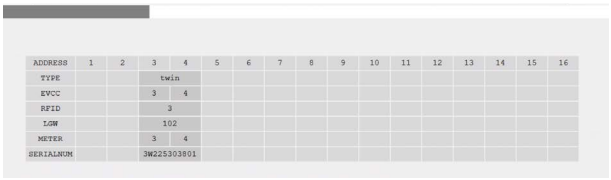
- Always wait **15 seconds** until the charging station is ready for use.



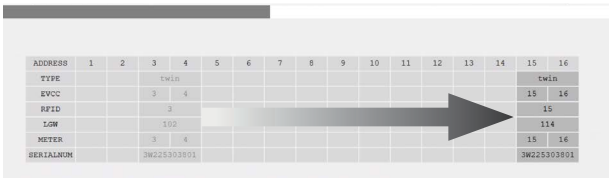
4 Click the **Automatic Configuration** button on the right-hand side of the interface.



- The **ABL – Configuration Software v1.6** searches the data bus and automatically enters all address values of the detected charging station in the corresponding columns of the address matrix.

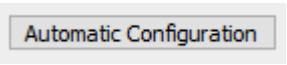


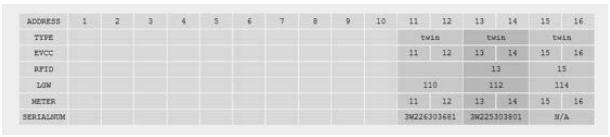
- Once all addresses have been detected, the charging station is moved to the right to the highest possible address value (**16**).
- For a twin charging station, the two address values (EVCC and meter) are allocated to address columns **15** and **16**.



5 Repeat steps **3** and **4** for all other Slave charging stations in the group, leaving all already registered Slave charging stations switched on.

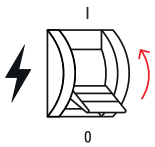
- The address values of all other charging stations are automatically distributed to the next address columns down.





6 After scanning all Slave charging stations, set the RCCB(s) of the Master charging station to position **I**.

- Always wait **15 seconds** until the charging station is ready for use.



WARNING!

Specifically for the Master charging station during address allocation

Make sure the MCB of the Master charging station is still set to position **0** so that the SBC (single-board computer) and the RFID module are not connected to the electric grid.

- **No** value is therefore displayed for the RFID module of the Master charging station after the scan.

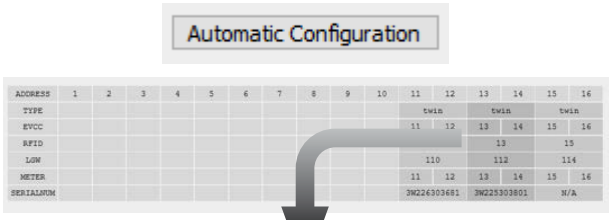
NOTE

No address allocation for external control units

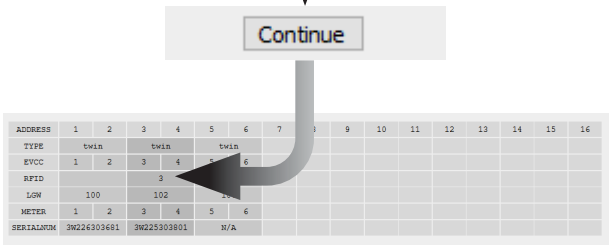
If you manage your group via the external control unit 1V0001/1V0002, the address allocation is completed when the last Slave charging station is automatically configured, and you can go directly to **Step 8**.

7 Click the **Automatic Configuration** button.

- The software searches the data bus again and enters the address values of the detected Master charging station in the next free columns below the last Slave charging station.

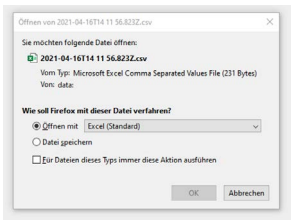


8 To complete the address configuration, click the **Continue** button on the right-hand side.



9 The **ABL – Configuration Software v1.6** moves the addresses of all detected charging stations together to the start of the address matrix from address column 1.

10 The completed address configuration is displayed in the matrix and the software gives the option of saving this address allocation as a CSV file on the computer or on another data carrier.



NOTE

Backing up the allocated addresses

The bus addresses defined with the **ABL – Configuration software** are required in order to finish setting up the group installation in the **Administration of the charging station** software.

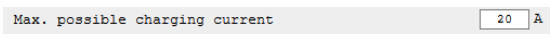
- Save the CSV file on your computer and print it out to use the addresses noted in it as a reference.
- Alternatively, you can take a screenshot of the address allocation and save it on your computer.

This completes the address allocation.

Additional settings for the group installation

If necessary, you can now change two further settings that are applied globally to all charging stations in the group.

- If you want to limit the charging current for every charge point in the group to a common maximum value, enter the desired upper limit in the **Max. possible charging current** field and then press **Enter**.
  - The charging current is now limited to the set value for all charging stations in the group.



- If you want to activate load imbalance detection for all charging stations in the group, click either of the radio buttons **16A** or **20A**. If load imbalance detection is not required, select the **Off** option.

This completes the basic preparation of the group within the ABL – Configuration Software v1.6.

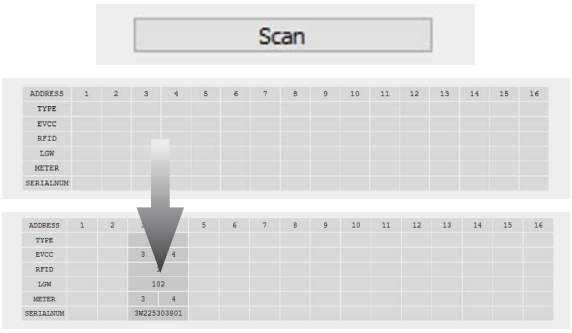
Advanced Configuration

If you want to check an existing group installation and change it if necessary, the **Advanced configuration** section in the lower part of the **Group configuration** interface provides access to the addresses allocated.

Proceed as follows:

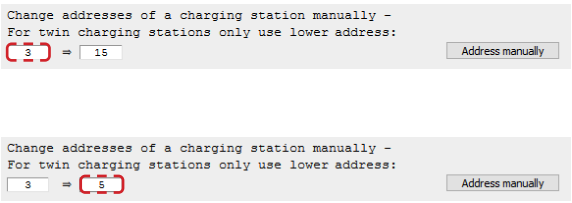
1 Click the **Scan** button on the right-hand side.

- This searches the data buses and displays all detected addresses in the address matrix.



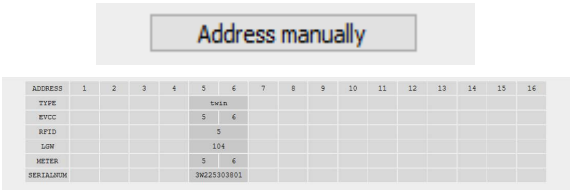
2 To change the addresses of the charging station, enter the (**Twin:** left-hand) address value of a component in the left-hand field (in this example: **3**).

3 Now enter the new destination address for the (**Twin:** left-hand) component in the right-hand field (in this example: **5**).



4 Now click the **Address manually** button.

- The new address value is now activated and all other allocated addresses are moved upwards in the same way.

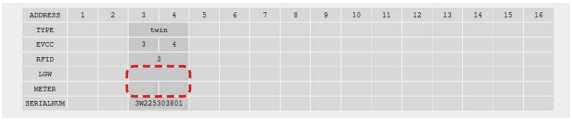


If addresses are not displayed, you can perform an advanced scan to add the missing addresses or correct incorrect address allocations.

Proceed as follows:

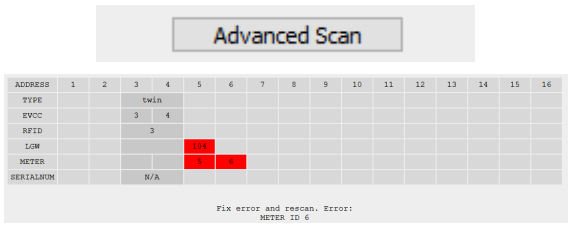
1 Click the **Scan** button.

- Undetected addresses are shown as empty fields in the address matrix.



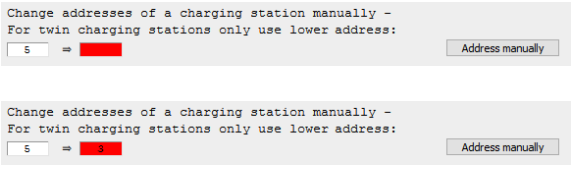
2 Click the **Advanced Scan** button.

- This searches all data buses and marks incorrectly allocated addresses in red in the matrix.
- A description of the error is also shown below the matrix.

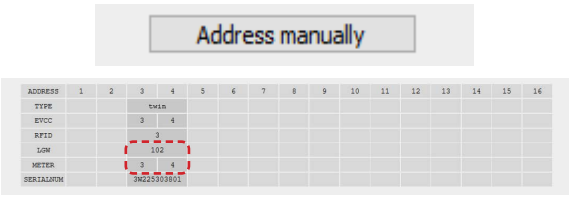


3 Now enter the (**Twin:** left-hand) value of the incorrect address in the left-hand field (in this example: **5**).

4 Enter the correct destination address in the right-hand field (in this example: **3**).



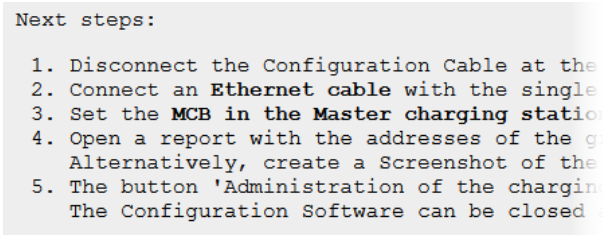
5 Now click the **Address manually** button.
   - The new address value is now activated and entered correctly in the address matrix.



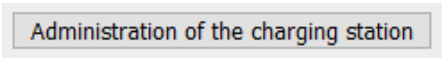
Completing the set-up (Next steps:)

The final steps of setting up the group installation are performed in the **Administration of the charging station** application, which can be run in a browser on the same computer as the **ABL – Configuration Software v1.6**. The working steps required to do this are summarised in the **Next steps:** section:

1 Follow the instructions in the **Next steps:** section:
   - Disconnect the wiring between the computer and the charging station
   - Connect the computer to the RJ45 socket of the charging station's SBC using an Ethernet cable
   - Set the MCB in the Master charging station to position **I** and wait 2 minutes
   - Open address allocation (CSV file or screenshot of the address matrix)



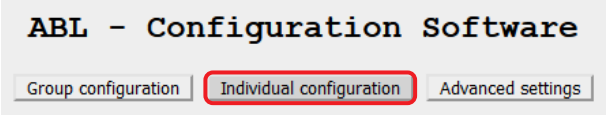
2 Click the **Administration of the charging station** button to open the application in the computer's browser.



For a detailed description of how to complete the set-up of your group installation, please refer to the installation manual of the respective charging station.

Configuring a single charging station

You can set up a single charging station for operation via the **Individual configuration** tab in the header of the **ABL – Configuration Software v1.6**. Click the **Individual configuration** button.

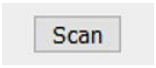


To carry out **Individual configuration** of a charging station, the preconditions mentioned on this page must be fulfilled:

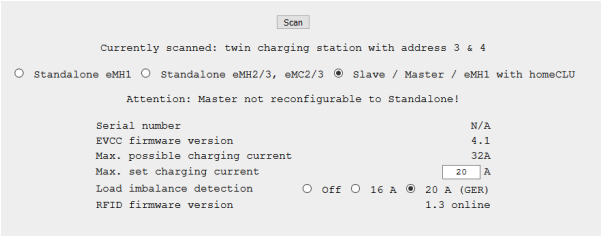
- The single charging station must be connected to the electric grid and supplied with voltage.
- Your computer must be wired to a Modbus interface of this charging station via the Configuration Cable **CONFCAB**.
  - Information on the **CONFCAB** can be found via the **Product search** on the ABL website.
  - Information on wiring can be found in the information sheet **Connecting the Configuration Cable**, which is available in the installation folder of the **ABL – Configuration Software v1.6** after unzipping.
- The RCCB of the charging station must be switched to position **I**.
  - For a Slave charging station, the MCB must also be switched to position **I**.
  - Always wait 15 seconds until all components of the charging station are ready for use.

Once these preconditions are met, proceed as follows:

- Click the **Scan** button to search the data buses.



- Basic information about the detected charging station is now displayed below the **Scan** button.
  - The entries **Serial number**, **EVCC firmware version**, **Max. possible charging current** and **RFID firmware version** are purely for information purposes and cannot be edited.
  - The entries for the operating mode, the **Max. set charging current** and **Load imbalance detection** can be changed directly (see next page).



Changing the operating mode

The following working steps are available as a video: → **Installation videos**

The three radio buttons below the detected charging station are used to display its operating mode or to change it if necessary. The following modes are available:

- **Stand-alone eMH1**
  - This mode is shown for an eMH1 wallbox operated as a single charging station at this time.
  - The **RFID firmware version** entry does not contain any information because the eMH1 wallbox does not have an RFID module.
  - If required, you can select the **Slave / Master / homeCLU** radio button to set up the eMH1 wallbox for operation with homeCLU load management.

- **Stand-alone eMH2/3, eMC2/3**
  - This mode is shown for an eMH2 or eMH3 Slave wallbox or an eMC2 or eMC3 Slave charging pole operated as a single charging station at this time.

- The **RFID firmware version** entry displays the description **offline** in addition to the firmware version: Local registration on the charging station using RFID cards can be activated (see "Advanced configuration for stand-alone operation" on page 11).
- If necessary, you can select the **Slave / Master / eMH1 with homeCLU** radio button to set up the charging station as a Master/Slave charging station for use in a group installation.

NOTE

Correct allocation of stand-alone modes

Please note the following points:

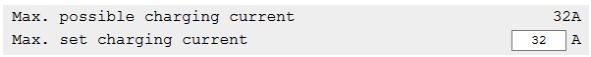
- The stand-alone modes are generally only available for Slave charging stations and eMH1 wallboxes. Master models can only be operated in conjunction with a backend outside of a group installation.
- Always use the stand-alone mode for your charging station unless you are using it in a group. Otherwise, model-specific functions will not be available during operation.

- Slave / Master / eMH1 with homeCLU
  - This mode is shown for an eMH2 or eMH3 charging station or an eMC2 or eMC3 charging pole operated as a Master or Slave in a group installation at this time.
  - The **RFID firmware version** entry displays the description **online** in addition to the firmware version. This means that the charging station is currently prepared for operation in a group. For a charging station in stand-alone mode, however, the status **offline** is displayed.
  - **Only for eMH1 and Slave charging stations:** If necessary, you can select the **Stand-alone eMH1** radio button (for the eMH1 wallbox) or **Stand-alone eMH2/3, eMC2/3** radio button (for the eMH2/3 wallbox or eMC2/3 charging pole) to operate the charging station in stand-alone mode.

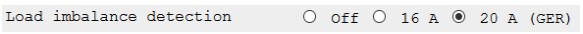
Individual settings for the charging station

If necessary, you can change two additional basic settings for the detected charging station.

- In the **Max. possible charging current** field, the maximum permissible nominal current for this type is shown.
  - If you want to limit the charging current to a lower value, enter the desired upper limit in the **Max. set charging current** field and then press **Enter**.



- If you want to activate load imbalance detection for the detected charging station, click either of the radio buttons **16A** or **20A**. If load imbalance detection is not required, select the **Off** option.



Advanced configuration for stand-alone operation

The following working steps are available as a video: → **Installation videos**

If you operate your charging station in **Stand-alone eMH2/3, eMC2/3** mode, you can set up additional parameters for stand-alone operation in the **Advanced configuration** section.

NOTE

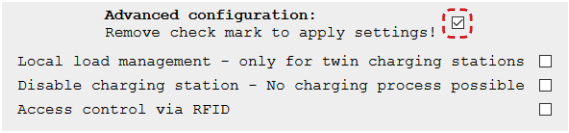
Advanced configuration only for eMH2/3 and eMC2/3 models

Please note that **Advanced configuration** is only available for eMH2 and eMH3 Slave wallboxes and eMC2 and eMC3 Slave charging poles, but not for the eMH1 model series!

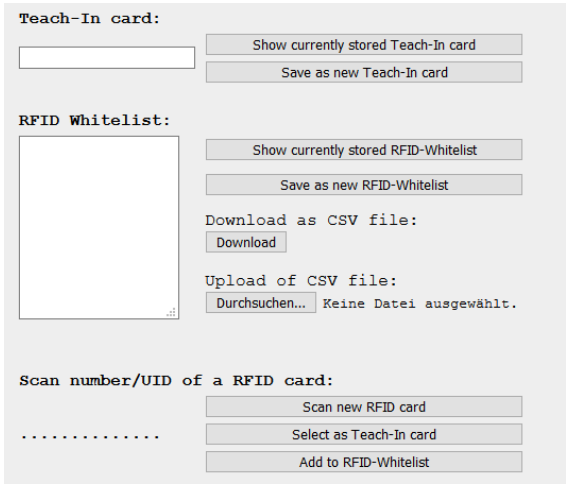
Proceed as follows:

1 Click the box next to **Advanced configuration**.

- The **Local load management**, **Disable charging station** and **Access control via RFID** functions are then displayed.



- It is also possible to configure RFID cards on the charging station and to save/load the ID numbers (user ID or UID) of configured cards as a CSV file (see "Management of RFID Whitelist" on page 13).



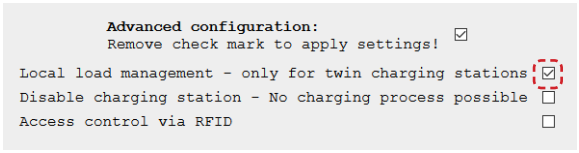
NOTE

Options for advanced configuration

The **Local load management**, **Disable charging station** and **Access control via RFID** functions can be active or inactive depending on the delivery status or based on an already existing configuration, and can be toggled if required.

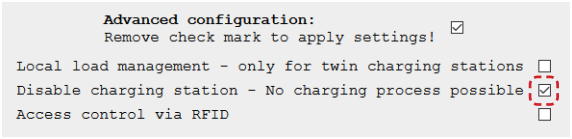
2 If necessary, click the **Local load management – only for twin charging stations** box.

- When you activate this function, the available charging current is automatically divided between both charge points of a twin charging station when you connect two vehicles.



3 If necessary, click the **Disable charging station – No charging process possible** button.

- When you activate this function, charging is no longer possible.

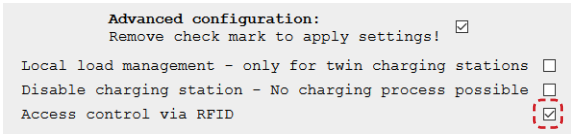


DANGER!

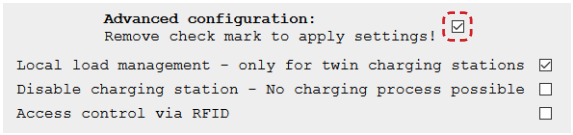
Dangerous electrical currents

Please note that the charging station's power supply cable is still charged with electricity even if you activate the **Disable charging station – No charging process possible** option. Working on live components inside the charging station is not permitted until the power supply cable is disconnected from the power supply.

4 Click the **Access control via RFID** box.
- If you activate this function, you must enable each charging process with an RFID card previously configured to the charging station (see next page).
- If the function is inactive (no tick), **Free charging** mode is active: The charging process starts automatically after the request by the connected vehicle.



5 If you want to end **Advanced configuration** without configuring RFID cards, click the box next to **Advanced configuration** again.
- The tick is removed and the functions are hidden.
- The settings are transferred to the charging station and are then immediately active.



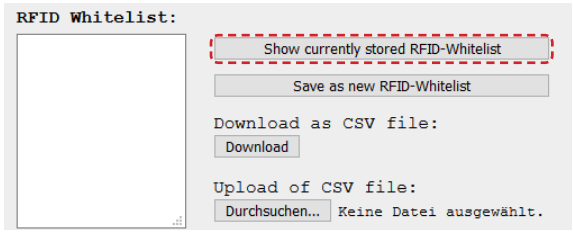
Management of RFID Whitelist

The following working steps are available as a video: → Installation videos

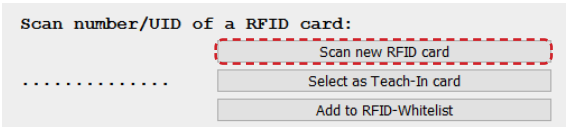
ABL offers RFID cards for enabling charging as optional accessories for your charging station. These RFID cards can be registered for operation with a stand-alone charging station in the lower part of the **Advanced configuration** section in the RFID Whitelist (list of RFID cards approved for the charging station).

Proceed as follows to register an RFID card in the RFID Whitelist of the charging station:

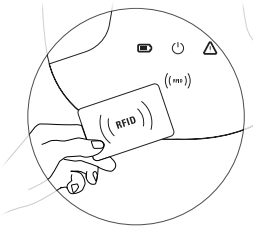
1 Click the **Show currently stored RFID-Whitelist** button to display a list of the ID numbers currently stored in the charging station.
- When the charging station is delivered, no ID numbers are stored and so the RFID Whitelist does not contain any entries.



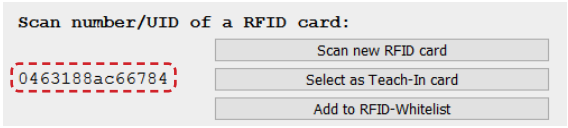
2 To add an RFID card, click the **Scan new RFID card** button in the **Scan number/UID of an RFID card** section.
- This puts the charging station's RFID module into **Reading** mode.



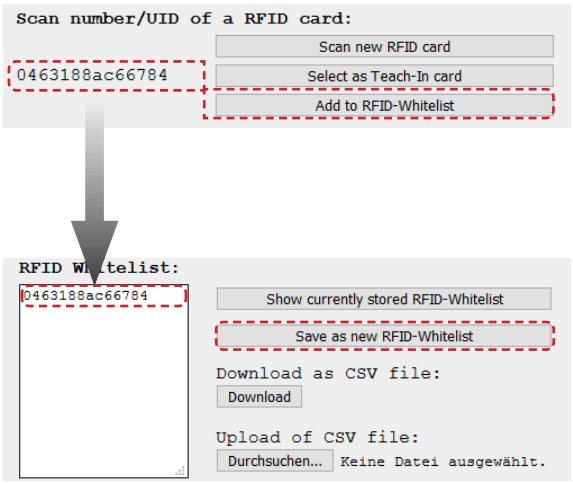
3 Switch to the charging station and hold an RFID card in front of the RFID module to scan it.



4 The read ID number of the RFID card is now displayed on the left-hand side.



5 Click the **Add to RFID-Whitelist** button to add the ID number to the **RFID Whitelist:** field.



6 Finally, click the **Save as new RFID-Whitelist** button to transfer the ID number in the RFID Whitelist to the charging station's memory.

- The RFID cards stored in the Whitelist and saved in the charging station can be used to enable the charging process for a stand-alone charging station with active access control via RFID.

NOTE

Overwriting existing ID numbers

If the RFID Whitelist in your charging station already contains entries, these are automatically overwritten by the steps described above. To add a new ID number to the existing RFID Whitelist, you must first load the saved numbers with the **Show currently stored RFID-Whitelist** button before registering the new RFID card in the Whitelist.

NOTE

Deleting existing ID numbers

If you want to delete an existing ID number from the current RFID Whitelist, you can load it into the **RFID Whitelist:** field with the **Show currently stored RFID-Whitelist** button, mark it manually there and then delete it with the backspace/delete key on your computer.

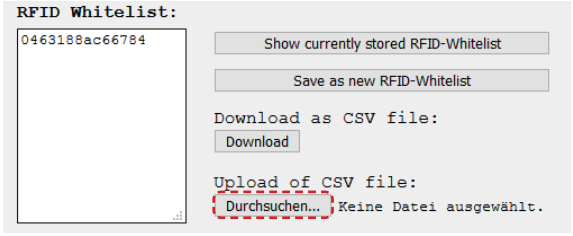
If necessary, you can save the charging station's current RFID Whitelist in a CSV file on the computer. Existing CSV files can also be loaded into the charging station to restore the RFID Whitelist at the time of saving.

Proceed as follows:

7 Click the **Download** button to save the charging station's current RFID Whitelist as a CSV file in a directory of your choice on the computer.

8 To load a CSV file containing an existing RFID Whitelist stored on the computer into the charging station, click the **Durchsuchen...** button.

9 Specify the storage path and press **Enter** to overwrite the current RFID Whitelist with the ID numbers in the CSV file.



If you also want to read a Teach-In card, continue with the next section. Otherwise, you can exit **Advanced configuration** as described in Step 7 on the next page.

Teach-In card management

The optionally available RFID cards can also be stored in the charging station as a Teach-In card if required: The Teach-In card can then be used to put the charging station's RFID module into **Reading** mode without a connected computer in order to register new RFID cards on the charging station.

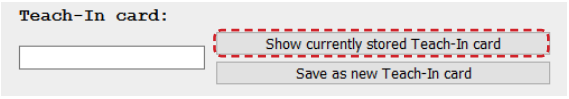
NOTE

Limit of one Teach-In card per charging station

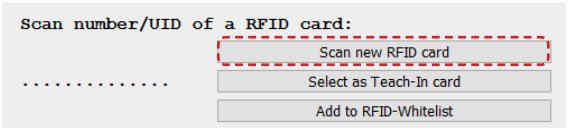
Only one Teach-In card can be stored for each charging station. If the existing Teach-In card is damaged or no longer available, it can be replaced by reconfiguring any RFID card.

Proceed as follows to store a Teach-In card on the charging station:

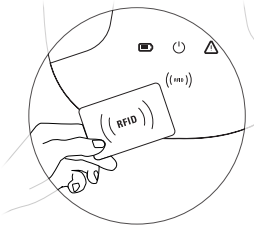
1 Click the **Show currently stored Teach-In card** button to display the ID number of the currently stored Teach-In card.
- The charging station is delivered with no ID number stored here.
- If an ID number was previously stored, it will be overwritten by the following steps.



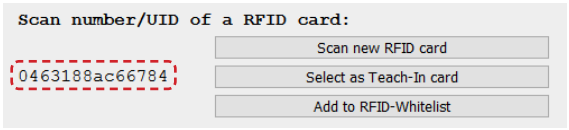
2 Click the **Scan new RFID card** button in the **Scan number/UID of an RFID card** section.
- This puts the charging station's RFID module into **Reading** mode.



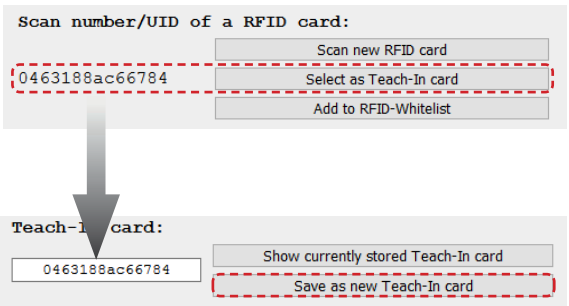
3 Switch to the charging station and hold an RFID card in front of the RFID module to scan it.



4 The read ID number of the RFID card is now displayed on the left-hand side.

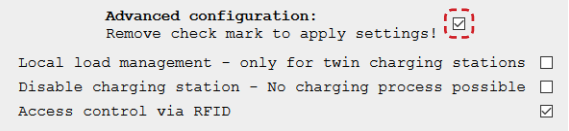


5 Click the **Select as Teach-In card** button to enter the ID number in the **Teach-In card:** field.



6 Click the **Save as new Teach-In card** button to store the ID number as a new Teach-In card on the charging station.
- If the ID number of another card was already stored, it will now be overwritten.

7 Click the box next to **Advanced configuration** to transfer the settings to the charging station and exit Advanced configuration.
   - The tick is removed and the functions are hidden.



In future, the newly stored Teach-In card can be used to configure new RFID user cards on the charging station without a computer connected.

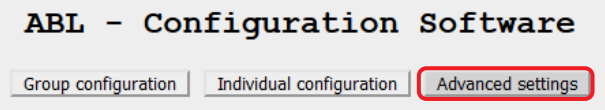
NOTE

Deleting an existing Teach-In ID number

If you want to delete the ID number of an existing Teach-In card, you can load it into the **Teach-in card:** field using the **Show currently stored Teach-In card** button, mark it manually there and then delete it with the backspace/delete key on your computer.

Advanced settings

If there are communication problems even though the wiring between your charging station and the computer is correct, you can check the allocation of the COM ports on your computer and adjust them if necessary. To do this, click the **Advanced settings** button.



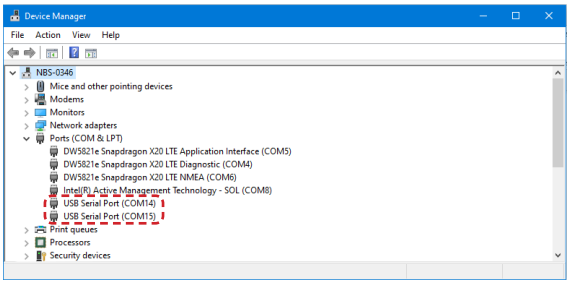
Changing the COM port addresses

In normal operation, the **ABL – Configuration Software v1.6** automatically assigns the different data buses (EVCC/RFID and meter) to the corresponding COM ports on the computer. Under certain circumstances, however, this allocation may subsequently change or deviate from the default for some other reason.

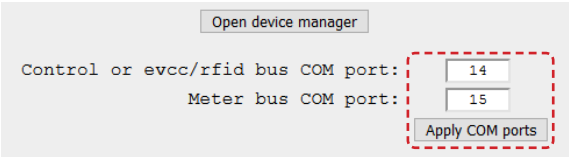
In this case, proceed as follows:

1 Click the **Open device manager** button.
   - Device manager is then displayed in the system settings on your computer.

2 Locate the COM ports used in the device manager to communicate with the charging station and note their addresses.
   - In the example on the right, these are the COM ports that are stored under **Ports (COM & LPT)** as **USB Serial Port**.



3 Enter these addresses in the fields for the respective data bus and click the **Apply COM ports** button.
   - Please note: The highest COM port must be allocated to the meter bus, and the second highest to the control bus.



The COM ports will now be used for communication to correctly set up the connection between the computer and the charging station.

NOTE

Download link for the virtual COM port driver

In the lower part of the **Advanced Settings** page you will find the link for the VCP (Virtual COM Port) driver, which is required for communication between the computer and the charging station.

- If communication cannot be established despite entering the COM ports correctly, download the driver and install it again.

Troubleshooting

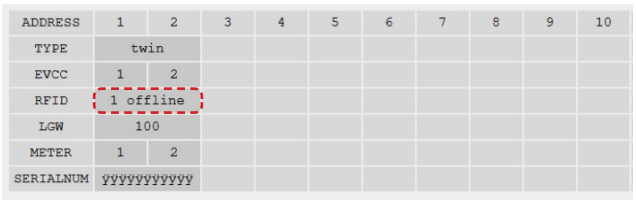
Under certain circumstances, malfunctions may occur during preparation of the charging stations. Possible errors are listed below along with suggestions for a simple solution to the problem.

Group configuration

Description

The error message **"Hostile bus traffic detected!"** is displayed.

Display in the software



Causes

- A Slave charging station set up for stand-alone operation is addressed in the group configuration.

Suggested solutions

- The charging station must be set to the **Slave / Master / eMH1 with homeCLU** operating mode again on the **Individual configuration** page (see "Changing the operating mode" on page 10).

Causes

- The MCB of a Master charging station is in position **I** (switched on) during addressing.

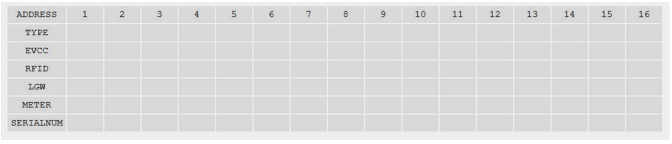
Suggested solutions

- Set the charging station's MCB to position **0** (switched off) and perform a scan again (see "Set-up via automatic addressing" on page 6).

Description

After activating the **Automatic Configuration** button on the **Group configuration** page or the **Scan** button in the **Group configuration > Advanced configuration** section, no address is detected and displayed in the matrix.

Display in the software



Causes

- The Configuration Cable is not connected to the computer and/or the Modbus interface in the charging station.

Suggested solutions

- Connect the Configuration Cable to a USB port on the computer and to the Modbus interface on the charging station.

Causes

- The allocation of the COM ports is incorrect.

Suggested solutions

- Go to the **Advanced settings** page, check the addresses of the COM ports in the **Device manager** and correct them if necessary (see "Advanced settings" on page 17).

Causes

- The VCP driver has not been installed.

Suggested solutions

- Install the driver (see "Preconditions for set-up using the ABL – Configuration Software" on page 4) and restart the software.

Causes

- The software was started before the Configuration Cable was connected.

Suggested solutions

- Exit the software, connect the Configuration Cable and restart the software.

Causes

- The MCB and RCCB of the charging station are in position **0** (switched off).

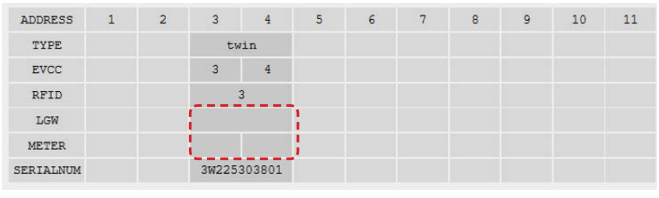
Suggested solutions

- Set the MCB and RCCB to position **I**.

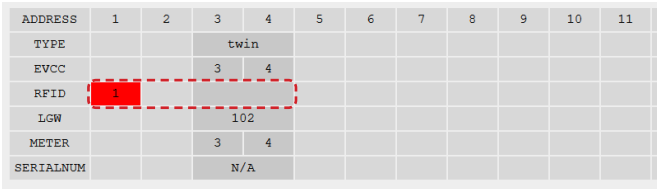
Description

- For a charging station that complies with calibration law, the LGW and meter addresses are not displayed.
- For a charging station that does not comply with calibration law, the meter addresses are not displayed.

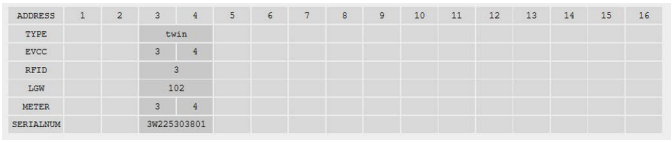
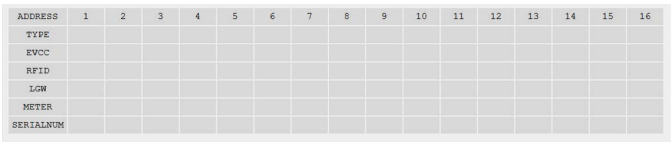
Display in the software



Causes	Suggested solutions
■ The meter addresses are set incorrectly (e.g. to address **5/6** instead of **3/4**).	■ Activate the **Advanced Scan** button to determine all meter addresses.
■ When extending an existing group, the communication parameters of the meters in the existing group are configured incorrectly.	■ Activate the **Find meter addresses** button and set the correct communication parameters for the meters. Then activate the **Scan** button. The meter addresses are now detected.

Description	Display in the software
The RFID address cannot be reconfigured.	

Causes	Suggested solutions
■ The RFID module is in **offline** mode: the charging station may have previously been set up for stand-alone mode.	■ Proceed as follows: • Reconfigure the charging station from address **3/4** to **1/2** via the **Address manually** button. • Then go to the **Individual configuration** page and scan the addresses. • Reconfigure the charging station to **Stand-alone** mode (RFID remains in **offline** mode, addresses remain at **1/2**). • Uncheck the **Advanced configuration** section and switch the charging station to **Slave / Master / eMH1 with homeCLU** mode. • Afterwards, the RFID module will be in **online** mode again and the addresses will be changed to **3/4**.

Description	Display in the software
Two (or more) Slave charging stations are connected and switched on simultaneously, but the addresses for only a single charging station (or none) are shown.	 or 

Causes	Suggested solutions
■ The Slave charging stations that are switched on simultaneously have the same addresses.	■ Proceed as follows: • Switch off all but one of the Slave charging stations and then configure their addresses manually or automatically. • Then switch on the next Slave charging station to configure it manually or automatically. • Repeat this process for all other Slave charging stations.

Description

A twin charging station (Slave) is represented as two single charging stations in adjacent address columns.

Display in the software

Causes

- The prescribed time of 15 seconds between switching on the charging station and the address configuration was not observed.
- The MCB of the charging station is in position **0**.

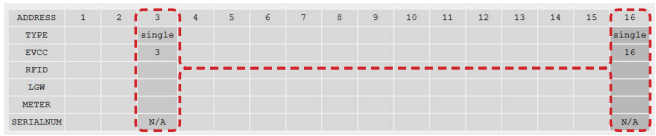
Suggested solutions

- Click the **Scan** button again to automatically determine the missing addresses.
- Set the MCB to position **I** and perform a new scan.

Description

A twin charging station (Slave) is represented as two single charging stations in non-adjacent address columns.

Display in the software



Causes

- The prescribed time of 15 seconds between switching on the charging station and the address configuration was not observed.
- The MCB of the charging station is in position **0**, therefore the RFID address cannot be found.

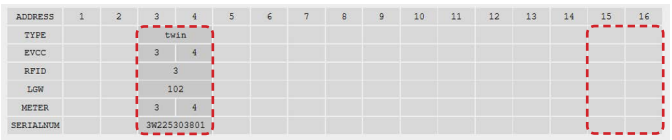
Suggested solutions

- Move the charge point with the higher address to the correct address value using the **Address manually** button.
- Set the MCB to position **I** and move the charge point with the higher address to the correct address value using the **Address manually** button.

Description

The Slave charging station is not automatically moved to the last free address value in the matrix using the **Address automatically** button, but remains in the factory setting (e.g. **3/4**).

Display in the software



Causes

- The prescribed time of 15 seconds between switching on the charging station and the address configuration was not observed.

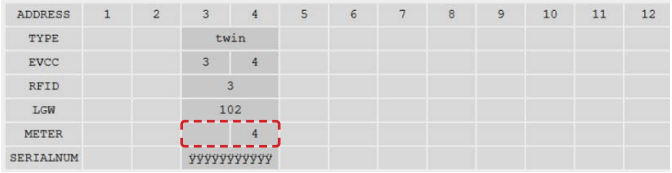
Suggested solutions

- Click the **Address manually** button again to automatically move the Slave charging station to the last free address value.

Description

For a twin charging station (Slave), only one meter address is displayed.

Display in the software



Causes	Suggested solutions
■ The addressing of the meter is incorrect: both meters are set to the same value.	■ Switch on the charge points individually and configure each of the addresses with the **Address manually** button: Set the address for the left charge point to the lower address (e.g. **3**) and for the right charge point to the higher address (e.g. 4).

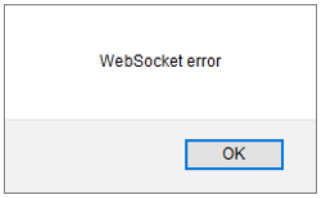
Individual configuration

Description

In **Standalone eMH2/3, eMC2/3** mode, the RFID access restriction is not active (corresponds to **Free charging** mode), even though RFID cards have been stored in the Whitelist.

Causes	Suggested solutions
■ In the **Advanced configuration** section, the **Access control via RFID** option is not ticked.	■ Open the **Advanced configuration** section and click the **Access control via RFID** box (ticked).

General

Description	Display in the software
The **ABL – Configuration Software v1.6** is no longer responding.	

Causes	Suggested solutions
■ The console running in the background was closed.	■ Restart the **ABL – Configuration Software v1.6**.

MADE IN GERMANY

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