## SKODA

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# **User Manual**

Škoda Charger Connect Škoda Charger Pro



Manufacturer of this charger: eSystems MTG GmbH Bahnhofsraße 100 73240 Wendlingen Germany

Škoda Charger is distributed by **Elli – a brand of the Volkswagen Group** Volkswagen Group Charging GmbH Karl-Liebknecht-Str. 32 10178 Berlin Germany

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#### **General Information**

#### 11 Scope of the document

Keep all documents supplied with the charger in a safe place for the entire service life of the product. Hand over all documents to all subsequent owners or users of the product.

The charger may only be operated in compliance with all national regulations at the place of use.

Version	Features
Connect	Basic model with 11 kW and 22 kW
Pro	With electricity meter (MID meter), LTE module, 22 kW
Eichrecht	With electricity meter (Eichrecht meter), LTE module, 22 kW

This manual is intended for both users and certified electricians. It contains important information on how to use the charger.

Please note that the term "charger" refers to all models, including, for example, Škoda Charger Connect, Škoda Charger Pro, and Škoda Charger Pro Eichrecht, unless expressly indicated otherwise. All safety precautions relating to the charger must therefore be observed for each of the models. In this document, the term "charger" refers to the entire charger, including the charging cable.

Please read and follow the procedures and recommendations described in this manual carefully.

#### **Time of printing**

All information found in this document is in accordance with the information available at the time of printing. Because upgrades are being made to the charger all the time, there may be discrepancies between the charger and the information contained in these documents. No claims can be derived from the various information, illustrations, and descriptions contained in them.

#### Software updates

Make sure that the latest software is always installed on the charger. Please note that software updates can only be installed via the MyŠkoda app.

Information on software updates for the charger can be found in the user manual in Section 5.12 Updating the software.

Information about the latest software updates can be found at https://www.elli.eco/en/changelog/wallbox. You are free to install or decline to install the update. If you decide not to install an update, this may impair both the safety and functionality of the charger. As a result, it may no longer be possible to use new functions or use of features may be restricted. Support cannot be provided in full if the charger is not running the latest software version.

Neither Elli nor Škoda shall be liable for any damage to the charger because the update was not installed.

#### **Customer Support**

If you have any questions about the charger or this manual, please do not hesitate to get in touch with us. You can contact us by phone or by e-mail. The contact information can be found on the last page of the manual.

#### 1.2 Safety precautions

#### Symbols

The symbols used in this document have the following meaning:

Symbols used and what they mean		
1., a., or I.	Measures to be followed in the specified order.	
•	Measures to be followed in no particular order.	
0	Texts with this symbol contain additional information.	

#### **Highlighted sections**



Texts marked with this symbol contain information about hazardous situations that, if disregarded, will result in death or serious injury.

#### Warning

Texts marked with this symbol contain information about hazardous situations that, if disregarded, may result in death or serious injury.

#### Caution

Texts marked with this symbol contain information about hazardous situations that, if disregarded, may result in minor or moderate injury.

#### Information

Texts marked with this symbol contain information on situations that may cause damage to the product if not observed.

## The following sections contain general information that refers to the use of the charger.

#### Danger

Failure to observe the instructions contained in this document may cause the user to be exposed to electric shock, resulting in serious injury or death.

- The charger may only be installed by certified electricians who are able to install the charger properly and safely according to DIN VDE 0100-600 and identify potential hazards.
- If you are not sure how to use the charger after reading this document, request assistance at www.elli.eco/en/contact.

If the charger indicates a fault or if the charger or charging cable show cracks, severe wear, or other physical damage (e.g., expanded housing, etc.), there is a risk of electric shock, which can result in serious injury or death.

- Contact Customer Support or your dealer if you suspect that the charger or cable may be damaged.
- Do not operate the charger if it is physically damaged.
- In the event of danger and/or an accident (e.g., smoke development or smell, cable damage, etc.), disconnect the power supply from the charger immediately and contact your technician before you switch the charger back on again.
- See "Troubleshooting" for explanations and further instructions on the error states displayed.

Do not expose the charger to excessive contact with water due to risk of electric shock, which can lead to serious injury or death.

- Do not direct a strong jet of water onto or against the charger.
- · Do not immerse the socket in liquids.

#### Danger

Installation, maintenance, repair, and relocation of this charger by a non-certified electrician can lead to a risk of electric shock, resulting in serious injury or death.

- Only certified electricians may install, maintain, repair, and relocate the charger. If the charger is modified by a non-certified electrician, Elli and Škoda reserve the right to reject any warranty claims.
- The user must not attempt to maintain or repair the charger as it does not contain any userserviceable parts. Extensions or adaptations that are not described in the user manual will invalidate the warranty.

#### <u>|</u> Warning

Improper use of the charger can cause damage to the charger, which may result in injury or death.

- Read this manual before using the charger.
- If you are not sure how to use the charger after reading this manual, request assistance at www.elli.eco/en/contact.
- The charger is an electric device. Children are not allowed to operate or play with the charger.

Do not use any adapters, converters, or cable extensions with the charger. This could damage the charger, possibly resulting in injury or death.

- Only use this charger to charge electric vehicles that are compatible with Mode 3\*.
- Refer to your vehicle's operating instructions to determine whether your vehicle is compatible.

\*Mode 3 is the most common charging mode, which includes all AC charging processes at public charging stations or chargers to which the electric vehicle is connected.



The use of a damaged charger (e.g., expanded housing, cracks in the charging cable, etc.) could expose the user to electrical components and pose a risk of electric shock, which could result in injury or death.

- Always ensure that the charger is undamaged before you start charging.
- Make sure that the charging cable is not damaged (kinked, pinched, or run over).
- Take precautions to ensure that the socket does not come into contact with heat sources, dirt, or water for even a short period of time.
- Always ensure that the contact surface of the socket is free of dirt and moisture before you start charging. Use the cable cover to protect the plug from dirt and moisture.

A damaged charging cable poses the risk of delivering an electric shock, which could result in danger to the user, serious injury, or death.

- Ensure that the charging cable is arranged in a way that prevents persons from stepping on it, tripping over it, running over it, or otherwise subjecting it to excessive pressure or damage. Wrap the charging cable around the charger and make sure that the socket does not lie on the ground.
- Only pull on the handle of the socket and never on the charging cable itself.

If the charger is exposed to high temperatures (e.g., an electric heater, open fire) or flammable substances (e.g., gasoline cans), this could damage the charger, possibly resulting in injury or death.

- Ensure that the charger or charging cable never comes into direct contact with heat sources.
- Do not use any explosive or flammable substances in the vicinity of the charger.

Using the charger under conditions not listed in this manual could damage the charger, possibly resulting in injury or death.

• Only use the charger under the operating conditions specified in this manual.

#### Caution

Do not insert fingers or other objects into the socket. This could lead to injuries or damage to the charger.

- Do not insert fingers into the socket.
- Always make sure to replace the protective cap after charging with the Type 2 plug to protect the socket from moisture.

#### Information

If the charging cable is not fully unwound during the charging session, the cable may overheat and damage the charger.

• Before charging your vehicle, make sure that the charging cable is fully unwound and that there are no overlapping loops.

#### Transportation and storage

- Disconnect the power supply before removing the charger for storage or relocation.
- Only transport and store the charger in its original packaging.
- Store the charger in a dry environment within the temperature range specified in the technical data and without exposing it to direct sunlight (see *Technical data sheet*).



eSystems MTG GmbH/Volkswagen Group Charging GmbH shall only accept liability for the condition of the charger at delivery and for work carried out by the manufacturer's technical staff.

#### 2 Product Overview

2.1 Design

The charger has the following components:



- 1 Housing
- 2 Front panel
- **3** Electricity meter
- 4 Charging cable
- 5 Decorative panel

#### 2.2 Functions

Function	Description
Intelligent charging functions	Smart charging
Remote control interfaces	Charger configuration Backend server via OCPP 2.0.1
Communica- tion interfaces	IEC 61851 ISO 15118-2 OCPP 2.0.1 EEBUS e-mobility use cases 1.0.1 Modbus RTU client/master Modbus TCP client/master
Authentication	RFID card Free charging Charger configuration Remote authentication via mobile app
Connectivity	Ethernet Wi-Fi hotspot Wi-Fi LTE*
Residual current detection	DC 6 mA
Software updates	Update via the MyŠkoda app (over the air)

\* Data volume only included in our backend for a term of ten years.

#### 2.3 Scope of delivery



The package contents may include more screws than are needed.

Part	No.
Basic charger	1
Cover	1
Design frame	1
Charging cable (permanently mounted)	1
Assembly and installation manual	1
Access data card	1
Declaration of conformity	1
Drilling template	1
RFID card	1
Flat head screw – 5 mm x 60 mm	4
Anchor – 8 mm x 60 mm	4
Sealing washer for wall mounting	4
M32 cable gland for infrastructure and ETH/RS-485 including nuts for cable feedthrough	2
Slotted insert with two cable glands for M32	1
Stainless steel screw for cover, 4 mm x 14 mm	10
Wall spacer	4

The charger ships with a letter that contains the access data. This includes the following information:

Information	Definition
Wi-Fi SSID	SSID Wi-Fi identifier of the charger. On delivery, the Wi-Fi identifier contains a device-specific sequence of numbers. This can be changed by the user in the charger configuration.
Wi-Fi password	Network key (password) for charger access via Wi-Fi hotspot (with WPA2 and WPA3).
Host name	Identification of the charger in the charger configuration as an alternative to entering an IP address. On delivery, the host name contains a device- specific sequence of numbers. This can be changed by the user in the charger configuration.
Password standard user	Password for the standard user role; for use in daily operation.
Password service user	Password for the service user role; for use when installing the charger for system settings. The service user is required during installation by a certified electrician.
PUK	Personal unlocking key if the user forgot the password.
QR code	To access the charger via charger configuration.

#### Check package contents

- 1. Immediately after unpacking the charger, check that all the parts are there in the package and that they are undamaged.
- 2. In the event that any parts are damaged or missing, please contact our Customer Support; see back of manual.

#### 2.4 Access data

2 Product Overview





#### **LED description**

1 RFID status

2

- 2 House status
- 3 Charger status
- 4 Vehicle status

#### LED status

- 5 Off
- 6 LED is moving\*
- 7 LED lights up\*
- 8 LED flashes\*

\* Green light is shown as an example; the system also uses white, blue, and orange LED indicators. Please note the color of the statuses described below.

All LED states are shown below.

Several errors can occur at the same time; see Section 7 Troubleshooting

Status description	Display	
<b>The charger is switched on.</b> You can start a charging session by connecting your car and authorizing the charging process.	(c)) 6 4	Ω
<b>The charger establishes a connection (starts up).</b> The charger establishes a connection or waits for an ongoing process to end.	(O)	
<b>Configuration required.</b> If the central LED flashes blue, the charger must be configured via the mobile or web app.		
<b>Software update is being carried out.</b> If the entire LED bar flashes yellow, the charger software is being updated. The status changes once the update is complete.		

Status description	Display		
<b>Authentication required.</b> If the upper icon flashes white, use your charging card or the app for authentication.	Â	4	Ω
<b>Authentication successful.</b> If the upper icon flashes green, authentication via the charging card or app was successful.	â	(100)) 47	Ω
<b>Authentication rejected.</b> If the upper icon flashes red five times, authentication via the charging card or app was not successful.	Â	53 (C)	Ω
<b>Charging session in progress.</b> If the green line moves from the house icon to the vehicle icon, your car is being charged.	Ĝ →	((O)) 4	Ω
<b>Fully charged.</b> As soon as your car is fully charged, the entire LED bar lights up green.	Â	((O)) 4	Ω
<b>The charging session is paused.</b> If the central LED flashes green, the charging session has been interrupted. The charging session will resume automatically, e.g., when sufficient energy is available or at the beginning of a charging schedule.	Â	((O)) 4 	Ω
<b>Critical error (house).</b> If the LED below the house icon flashes orange, the charger has detected a problem with the connection to your home's electrical connection. For further information, consult Section 7 <i>Troubleshooting</i> .		((O)) 4	Ω
<b>Critical error (charger).</b> If the LED below the energy icon flashes orange, the system has detected a problem with the charger. For further information, consult Section 7 <i>Troubleshooting</i> .	â	((O)) 4 7 1 1 1	Ω
<b>Critical error (car).</b> If the LED below the car icon flashes orange, the charger has detected a problem with your car. For further information, consult Section 7 <i>Troubleshooting</i> .	Â	(O)) 4	
<b>Fatal error.</b> If the RFID symbol flashes red and the entire LED strip lights up red, the charger has detected a fatal error. Contact Customer Support. For further information, consult Section 7 <i>Troubleshooting</i> .	â	((O)) &	
<b>Faulty RFID module.</b> The charger has detected an error in the RFID module. Contact Customer Support.	â	((O)) 4	Ω

#### Starting the Charger

#### **User roles**

It is necessary to log in as a service user to perform settings during installation and make systems settings on the charger. Such settings are marked "For service user only" and may only be carried out by certified electricians.

The standard user role is intended for use in daily operation of the charger. We recommend that you use the MyŠkoda app for the daily operation of your charger.

4.1 Connecting to the charger via charger configuration

**Prerequisite:** The charger must be switched on.

- 1. Have the access data card ready at hand; see Section 2.4 Access data.
- 2. Search the list of available Wi-Fi devices on your laptop, tablet, or smartphone.
- 3. From the list of available Wi-Fi devices, select the charger with the Wi-Fi ID (SSID) found on the access data card.
- 4. Establish a connection with the selected charger.
- 5. Enter the Wi-Fi password (network key) of the charger, which you'll find on the access data card.
- 6. After successfully connecting to the charger's Wi-Fi hotspot, open the web browser.
- 7. Enter the host name of the charger into the address line as shown on the access data card.

The login screen is displayed in the charger configuration with the option to log in.

If the charger configuration does not open, enter the IP address of the charger in the web browser instead of the host name.



A warning may be displayed, stating that this is an "unsafe page." You can ignore and close this message.

8. Select the standard user as the user role.

Important: System settings can only be made as a service user.

9. Enter the password for the standard user, which you can find on the access data card.

After successful login, you will see the overview screen.

#### 4.2 Configuring charger network settings

#### 4.2.1 Ethernet

For service users only.

**Prerequisite:** An Ethernet cable must be installed to connect the charger via Ethernet.

1. Connect the charger to the network using an appropriate Ethernet cable.

You may have to check the network configuration if the switch used requires this for new network users.

- 2. Open a web browser of your choice and connect your charger via the host name.
- 3. Log in to the charger configuration as a service user.
- 4. Select the "Ethernet connections" option via the navigation. The "Ethernet" screen and the corresponding MAC address are displayed.
- Activate/deactivate automatic address assignment (DHCP). The IPv4 or IPv6 addresses can only be entered if automatic address assignment (DHCP) is disabled. Otherwise these addresses will be displayed for your information only.
- 6. Enter the following to configure an IPv4 address:

IPV4 address, IPV4 subnet mask, IPV4 gateway

7. Enter the following to configure an IPv6 address:

IPV6 address, length of the IPV6 prefix, IPV6 gateway

8. If necessary, change the host name of the charger and the default DNS server address.

## No connection to web browser established via Ethernet cable

If no connection could be established:

- Check whether the charger is connected to a network switch or an appropriately configured computer, and ensure that this is active and does not indicate any errors.
- 2. Check whether the charger is displayed in the network environment overview.
  - a. If necessary, restart the switch or laptop.
  - b. Check the cables and disconnect and reconnect them if necessary.
  - c. Consult your network administrator if necessary.
- 3. Pay close attention to spelling when connecting via the host name.

# 4 Starting the Charger

## 4.2.2 Integrating the charger into the Wi-Fi home network

For service users only.

The Wi-Fi hotspot can also remain active in client mode.



The charger has a pre-installed internal firewall and security mechanisms for IP-based network communication.

- Only install the charger in a private network and use a firewall there too.
- Use either WPA2 (default setting) or WPA3 for secure Wi-Fi use.

Wi-Fi operation with unencrypted protocols or protocols that no longer comply with the current security standard, such as WEP, is not possible.

#### Selecting a detected network

If you want to connect the charger as a client to another Wi-Fi network, select the network as follows:

- 1. Log in to the charger configuration.
- 2. Select the "Wi-Fi connections" option via the navigation. The "Wi-Fi connection" screen with all available Wi-Fi networks is displayed, sorted by signal strength.
- 3. Click the right arrow on one of the detected networks and enter the corresponding network key (password).
- 4. Confirm the Wi-Fi connection.

Alternative procedure for networks that do not transmit their SSID for security reasons and are therefore not displayed in the list of detected networks:

- 1. Select the "Add Wi-Fi" option on the "Wi-Fi connections" screen.
- 2. Enter the corresponding SSID and the network key (password).
- 3. Confirm the Wi-Fi connection.

#### **Disconnecting the Wi-Fi connection**

- 1. Select the "Wi-Fi Connection" option via the navigation.
- 2. Disconnect the connected Wi-Fi on the "Wi-Fi connection" screen.

#### 4.2.3 LTE

For service users only.

This functionality is only available for the Charger Pro and Charger Pro Eichrecht. The LTE data volume is only included in combination with our backend for a term of ten years. **Prerequisite:** You need an eSIM card for LTE modem use to connect the charger via LTE. The eSIM card is already installed in the Pro versions of the charger.

- 1. Log in to the charger configuration.
- 2. Select the "LTE connections" option via the navigation.
- 3. Activate the "LTE" option on the "LTE connections" screen.

Default setting: LTE is activated.

The following information is displayed:

- Signal strength of the LTE connection as a bar
- Name of the connected network
- Status of the connection: connected, connecting, connected to unauthorized provider, not connected, fallback to 2G, SIM locked, PIN required, no SIM detected, error, not installed
- Parameters for LTE identification:

IMSI: International Mobile Subscriber Identity

IMEI: International Mobile Equipment Identity

ICCID: Integrated Circuit Card Identifier Network mode

#### 4.3 Authentication with the charger

Prerequisite for successful registration as a standard user:

The service user has completed the onboarding process in the charger configuration.

- 1. Find the password for the standard user on the access data card.
- 2. On the "Login" screen, select the standard user role, enter the corresponding password, and confirm it.
  - Pay attention to proper spelling of the access data – upper and lower case in particular. After entering the password incorrectly five times, the next attempt will only be possible after a delay.
- 3. When logging in for the first time as a standard user, please read and accept the disclaimer and the information regarding the protection of personal data.

After successful login, you will see the charger overview screen. It shows all key operating statuses and measurement values in a concise format.

#### 5 Operation

5.1 Logging in/out



#### Logging in to the charger configuration

1. Open the web browser and enter the host name into the address bar as found on the charger access data card to launch the charger configuration.



- If the charger configuration does not open, enter the IP address of the charger (10.0.2.1) in the web browser instead of the host name.
- 2. On the Login screen, enter the individual password found on the access data card or the self-assigned password on the "Standard" tab for the standard user or service user and confirm it.

Pay attention to proper spelling of the access data – upper and lower case in particular. After entering the password incorrectly five times, the next attempt will only be possible after a delay.

#### Quitting the charger configuration

- 1. Click the user icon in the title bar.
- 2. Click Logout.

The Logout screen is displayed.

If do not interact with the charger via the charger configuration or the front panel for more than 20 minutes, you will be logged out automatically.

## 5.2 Connecting the charger with the MyŠkoda app

To be able to use all of the charger's online services, you must connect your charger to your Škoda account.

- 1. Download the MyŠkoda app.
- 2. Create an account or log in.
- 3. Follow the steps shown in the app.





Apple App Store

Google Play Store

#### 5.3 Information on the overview screen

The system information is displayed in the overview.

The background of the overview has the color of the state of charge LED on the front panel; see Display Elements and Controls.

The following system information is displayed:

- Charging status
  - No vehicle connected
  - · Vehicle is connected
  - · Vehicle is charging
  - · Charging paused
  - · Charging completed
  - · Charging error
  - · Charging currently not possible
- Charging energy currently used to charge the vehicle
- Maximum charging current (A)
- Device data of the charger's internal electricity meter: Manufacturer/type, status, hardware version, software version, serial number, calibration date, operating times, meter reading
- Energy consumption shown as a charging curve: A graphical representation of the energy consumption in kWh is shown for the current charging session.
- Display of the network status for all networks: Ethernet, Wi-Fi, LTE, OCPP, HEMS

Possible statuses: Connected, not connected, not set

The following actions are available if a vehicle has been detected or a charging session is in progress:

- Select "Start charging session" to start the charging session for the connected vehicle once; see also 5.4.1 Start charging.
- Select "Stop charging session" to stop the charging session; see also 5.4.4 Stop charging.

#### 5.4 Charging the vehicle

#### 5.4.1 Start charging

1. Plug the charging cable into the vehicle.

The charger issues a charging authorization and starts the charging process in one of the ways detailed below:

Free charging

The charger issues a charging authorization without any interaction between the user and the vehicle. Default setting: activated

Private charging

Authentication is required in order for the charger to issue a charging authorization. The table below provides an overview of the different authentication options available.

If OCPP is activated and a connection to the OCPP backend server has been established, the charging authorization is always issued by the OCPP backend server. Prerequisite: Free charging must be deactivated in the charger configuration.

Authen- tication	Description	Requirements
RFID	The user holds an RFID card to the sensor at the front panel of the charger.	• The RFID card has been registered on the charger, is held up to the sensor, and is detected by the charger.
Charger configura- tion	The user can issue a charging authorization via the charger configuration.	<ul> <li>The user has opened the charger configuration and selected "Start charging session" from the overview.</li> </ul>
Mobile app	The user can issue a charging authorization via the MyŠkoda app.	<ul> <li>The user has installed the app.</li> <li>OCCP backend connection is activated and established for the charger.</li> <li>The option for remote authentication is activated for the charger.</li> </ul>

Basic charging

The charger automatically switches to basic charging in the event of an error. It is still possible to charge the vehicle. The charger charges without any further action on the part of the user. Functions such as energy management, Plug & Charge, and other communication cannot be used.

The LED light on the front panel lights up depending on the state of charge; see Section *3 Display Elements and Controls.* In the charger configuration, the state of charge is displayed accordingly in the overview.

#### 5.4.2 Charging with the RFID card

**Prerequisites:** The RFID card is registered and added to the charger's authorization list; see Section 5.6.2 Adding an RFID card to the authorization list. The vehicle is connected to the charger.

#### ! Warning

Risk of injury from RFID sensor for people with a pacemaker or defibrillator.

- If you are wearing a pacemaker, keep at least 60 cm away from the RFID sensor located at the front panel of the charger.
- If you are wearing a defibrillator, keep at least 40 cm away from the RFID sensor located at the front panel of the charger.
- 1. Hold the RFID card to the RFID sensor at the front panel of the charger.

If it is detected successfully, the RFID sensor LED briefly lights up green, and the charging session commences.

- If the RFID card is not detected correctly, the RFID sensor LED on the front panel lights up red.
- Hold the RFID card to the sensor again.
- Check whether the RFID card is compatible with the charger and ensure that it has been registered.
- 2. The LED light on the front panel lights up green; see Section 3 *Display Elements and Controls*. In the charger configuration, the state of charge is displayed accordingly in the overview.

#### 5.4.3 Pause charging

This function is only available for vehicles with extended communication (ISO 15118).

Charging breaks are controlled based on a charging schedule.

The LED light on the front panel flashes green; see Section 3 Display Elements and Controls. In the charger configuration, the state of charge is displayed accordingly in the overview.

#### 5.4.4 Stop charging

The charging session can be stopped or terminated in the following ways:

 Navigate to "Stop charging session" in the charger configuration to stop the charging session.

The LED light on the front panel lights up green and remains lit; see *3 Display elements and controls*. In the charger configuration, the state of charge is displayed accordingly in the overview.

• You can stop the charging session with your RFID card or in the app if you have started the process with the RFID card or the app.

When the charging session is complete, proceed as follows:

- 1. Remove the charging cable from the vehicle.
- 2. Securely return the charging cable to the charger.

#### 5.4.5 Configuring the PLC connection to the vehicle

For vehicles with extended communication, a vehicleto-grid connection (V2G) to the charger can be activated (default setting) or deactivated via PLC.

- If V2G is activated and the vehicle present does not support extended communication, there may be delays in starting the charging session, or charging may not start. If you are using such a vehicle, the PLC connection should be deactivated.
- 1. Log in to the charger configuration.
- Select the "PLC connections" option via the navigation. The "Vehicle with extended charging function (PLC)" screen is displayed.
- 3. Activate/deactivate vehicle connection via PLC.

#### 5.4.6 Charging information and settings

#### Configuring the maximum current

- 1. Select the "Charging management charging settings" option via the navigation.
  - i Configuration of a maximum charging current can be useful if no energy management system is connected to the charger.
- 2. Set a value for the maximum charging current (A) on the "Charging current" screen.

The maximum value that can be set is automatically limited by the current carrying capacity of the vehicle, charger, and grid connection. The current carrying capacity of the grid connection is configured by the installer during installation of the charger.

- 5.5 Free charging (activate/deactivate charging without authentication) *For service users only.*
- 0

The OCCP connection must be deactivated in the charger configuration.

Free charging enables charging without local authentication or authentication via the backend server.

- Select the "Vehicle management authorization list" option via the navigation. The "Local authorization list" screen opens.
- 2. Activate/deactivate free charging.
- 5.6 Managing the authorization list *For service users only.*

The charger configuration can manage up to 1,000 individual vehicles in the authorization list.



## 5.6.1 Adding RFID cards to the authorization list via charger configuration

#### ! Warning

Risk of injury from RFID sensor for people with a pacemaker or defibrillator.

- If you are wearing a pacemaker, keep at least 60 cm away from the RFID sensor located at the front panel of the charger.
- If you are wearing a defibrillator, keep at least 40 cm away from the RFID sensor located at the front panel of the charger.



In addition to the RFID cards supplied, all standard RFID cards of NFC Forum type 1–5 can also be used.

- 1. Select the "Vehicle management authorization list" option via the navigation.
- 2. Select "Add RFID card." The "Set up RFID cards" screen is displayed.
- 3. Hold the RFID card to the RFID sensor at the front panel of the charger and select "Read RFID cards."

As soon as the RFID card has been detected, the ID of the RFID card (UUID) is displayed on the "Set up RFID card" screen. In addition, the RFID sensor LED briefly lights up green.

- If the RFID card is not detected correctly, the RFID sensor LED on the front panel lights up red.
- Hold the RFID card to the sensor again.
- Check whether the RFID card is compatible with the charger.
- 4. Enter the name of the RFID card in the "RFID card name" field and save the setting.

The RFID card is displayed as a registered card on the "Local authorization list" screen.

## As an alternative: Setting up the RFID card without holding it to the RFID sensor

**Prerequisite:** The UUID of the RFID card is known.

- 1. Select the "Vehicle management authorization list" option via the navigation.
- 2. Enter the UUID (identification of the RFID card) and the name of the RFID card on the "Set up RFID card" screen.

#### 5.6.2 Changing the RFID card name

- 1. Select the "Vehicle management authorization list" option via the navigation.
- 2. Select the RFID card you want to edit.
- 3. Change the name in the "RFID card name" field and confirm this by clicking "Save."

## 5.6.3 Removing the RFID card from the authorization list

- 1. Select the "Vehicle management authorization list" option via the navigation.
- 2. Select the RFID card to be removed.
- 3. Click the menu icon and select "Delete selected entries."

The RFID card is removed from the authorization list.

#### 5.6.4 Managing the RFID card via the MyŠkoda app

RFID cards can be added or deactivated in the app at any time.

- 1. Open the charger settings in the app.
- 2. You can add or deactivate a new RFID card via "Manage authorized cards."
- The user account associated with the charger must also be linked to the RFID card so that the RFID card can be used for the respective charger.
- 5.7 Managing OCPP settings
- **5.7.1 Connecting the charger via OCPP** For service users only.
- 1. Select the "OCPP connections" option via the navigation.
- 2. CPP is activated by default.
- 3. Enter the following data for the OCPP backend. This information is provided by your backend service provider:
  - URL of the OCPP backend server
  - Port of the OCPP backend
  - OCPP version
  - User name
  - Password of the OCPP access point
  - Activate/deactivate TLS encryption. Default setting: activated

4. Enter the ID for the charge point in the Charge point OD/EVSE ID field.

The EVSE ID is provided by the CPO.

5. Select Establish connection.

The connection is established. "Connection started" is displayed as the status, and the "Disconnect" option is available.

- 6. You can optionally activate/configure the following settings:
  - Allow remote start of the charging session: Remote authentication of a charging session, such as via the CPO app, allowed/not allowed.
     Default setting: not allowed.
  - Timeout for establishing a connection with the vehicle (in minutes and seconds): Time the user has to insert the Type 2 plug of the charging cable into the vehicle socket before charging.

Permissible value range: 15–180 seconds, default setting: 45 seconds.

#### 5.7.2 Disconnecting the OCPP connection

- 1. Select the "OCPP connections" option via the navigation.
- 2. Click "Disconnect."

#### 5.8 Smart charging functions

We offer you a number of smart charging functions that enable you to charge your electric vehicle intelligently. These include solar forecast charging, PV surplus charging, and price-optimized charging. We are constantly improving features and will continue to expand our range of services. Costs may be incurred for this.

Information and instructions on the functions offered and the configuration can be found in the MyŠkoda app. Simply follow the instructions in your app. 5.9 Configuring general settings

#### 5.9.1 Setting the brightness of LEDs

- If the automatic brightness setting is activated (default setting), the brightness of the LEDs is controlled depending on the readings of the light sensor. If the automatic brightness setting is deactivated, the brightness of the LEDs remains at a constant level.
- Select the "Charger settings LED brightness" option via the navigation.
- 2. Activate/deactivate the brightness via "Set brightness automatically."
- 3. Use the slider to adjust the brightness.
  - Manual control: The brightness is permanently set to the selected value, regardless of the light sensor readings.
  - Automatic control: The brightness range is set independently of each other using two controls.

#### 5.9.2 Changing the password

- Depending on whether you are logged in as a standard user or a service user, the corresponding password will be changed.
- 1. Select the "Charger settings Password" option via the navigation.
- 2. Enter your existing password in the "Old password" field.
- Enter the new password in the "New password" field and confirm it by entering it again in the "Repeat password" field.
- Please observe the following rules for entering your password:
  - Length: 8–14 characters
  - The password must contain at least one number, one lower case letter, one upper case letter, and one special character (@-\_+\*!\$%#).
  - The first character must not be a special character.
- 4. Confirm your entry by clicking "Save."

#### Logging in with PUK

- 1. Select "Forgot password" if you have forgotten the password or have entered it incorrectly five times.
- 2. Find the PUK on the access data card.

3. Enter the PUK and confirm your entry by clicking "Send PUK."



Pay attention to proper spelling of the PUK. After entering it incorrectly five times, the next attempt will only be possible after a delay.

4. Assign a new password as the PUK is only intended as an emergency code.

#### 5.9.3 Setting the language

- 1. Select the "Charger settings Language" option via the navigation.
- 2. Select the desired language from the list of languages. The language of the web browser is used by default.

#### 5.9.4 Setting units

For service users only.

- 1. Select the "Charger settings Units" option via the navigation.
- 2. Select the desired unit for the following parameters:
  - Distance: Kilometers (default setting), miles
  - Temperature: °C (default setting), °F
  - Charging time SoC

Relative: Remaining time

Absolute (default setting)

5.9.5 Activating/deactivating earthing monitoring For service users only.

#### Danger

Danger to life due to electric shock.

Using the charger without active earthing monitoring can result in electric shocks, short circuits, fires, explosions, or burns.

- Only deactivate the earthing monitoring when using a non-earthed power supply system.
- 1. Select the "Charger settings Earthing monitoring" option via the navigation. Earthing monitoring is activated by default.
- 2. Activate/deactivate earthing monitoring.

#### 5.9.6 Displaying the electricity meter status

1. Select the "Charger settings - Electricity meter" option via the navigation.

The following electricity meter data is displayed under Device data:

- Manufacturer/Type
- Status:
  - Active
  - Connected
  - Error
  - Not equipped if the charger does not have an electricity meter
- Hardware version
- Software version
- Serial number
- Calibration date
- Operating times (in hours)
- Meter readings (in kWh)

Only for Charger Pro Eichrecht: The QR code of the electricity meter is displayed under "Public key."

#### 5.10 Restarting the charger

Prerequisite: The charger must be switched on.

- 1. If necessary, interrupt the ongoing charging session.
- 2. Click "Restart" in the charger settings of your charging app.

It may take a few minutes to restart the charger. If the charger is then displayed as online in the app, the restart has been completed successfully.

- 5.11 Reset to factory settings For service users only.
- i With the exception of the country code, all individual settings are reset to the factory settings, such as the authorization lists.
- 1. Open the charger configuration.
- 2. Select the "Charger settings Factory settings" option via the navigation.
- 3. Click "Reset factory settings" and confirm this choice.

After a successful reset, the charger is restarted.

#### 5.12 Updating the software

#### Caution

Do not disconnect the charger from the power supply when installing a new update. This could lead to injuries or damage to the charger.

- Ensure a continuous power supply to the charger when performing a software update.
- Always make sure to replace the protective cap after charging with the Type 2 plug to protect the socket from moisture.

#### 5.12.1 Information on software updates

#### Information in the charger configuration



- For the standard user.
- 1. Select the "Software update" option via the navigation.
- 2. In the overview you can check whether a new update is available, which software version is currently installed, and you can view the change log.
- - For the service user.
- 1. Select the "Software update" option via the navigation.
- 2. You can select the following functions:
  - Activate/deactivate automatic update download

Activated: default setting. The system checks whether software updates are available and downloads them automatically.

Deactivated: The system checks whether software updates are available. If this is the case, a message is displayed. The download must be started manually.

Activate/deactivate automatic update installation

Activated: If a software update has been downloaded, it will be installed automatically by the charger.

Deactivated: The installation can be postponed to a later date. The installation of a software update only starts when requested by the user.

Local update allows you to select a locally stored file.



If the charger is connected via OCPP, these functions are deactivated. The software is downloaded automatically.

#### **Display change log**

- 1. Select the "Software update" option via the navigation.
- 2. Click "Change log."

The change log with information on all updated software components is displayed.

#### 5.12.2 Updating the software via the MyŠkoda app

As soon as a new software version is available, a pop-up window opens in your app.

- 1. Click "Update software" and follow the instructions in your app.
- 2. The latest software update will be installed.

#### Manual software update

- 1. Navigate to the charger settings in your app.
- 2. Click "Update software."
- 3. Here you will find information on the currently installed software version, and you can initiate the software update if no pop-up window has opened.

#### Automatic software update

- 1. Navigate to the charger settings in your app.
- 2. Click "Update software."
- 3. Activate/deactivate the "Automatic update" function.
  - If auto update is activated, the system checks for available software updates, which are then downloaded automatically.

#### 6 Service and Cleaning

6.1 Carrying out periodic inspections

#### ! Warning

Risk of injury and damage to property if personnel are not adequately trained or qualified.

This can result in serious injuries and damage to property.

• Only trained and suitably qualified personnel may work on the charger.



Some periodic inspections may only be carried out by a qualified electrician; see the table below.

The operator is responsible for carrying out the periodic inspections.

The following periodic inspections are required by law:

Part	Type of inspection	Inspec- tion interval	To be carried out by
Charging cable, charger	Visual inspection for defects	With every charging session	User/ operator
Charger	Ready for use	With every charging session	User/ operator
Charging cable, charger	Measurements and inspections in accordance with local regulations (e.g., in Germany in accordance with DIN VDE 0701/702)	Annually	Electrician
Charger	Measurements and inspections in accordance with local regulations (e.g., in Germany in accordance with DIN VDE 0105/100)	Annually	Electrician
Electricity meter (only for Charger Pro Eichrecht)	In accordance with the German Standard Weights and Measures Law (Eichrecht)	Every eight years from date of manu- facture	

#### Inspection during initial commissioning

During initial commissioning, a qualified electrician must check the charger for correct installation and electrical safety (e.g., in Germany in accordance with DIN VDE 0100). You can download the commissioning report at https://www.elli.eco/en/downloads/.

## Prepare inspection in accordance with German Standard Weights and Measures Law (Eichrecht)



- 1. Clean the charger for calibration.
- 2. Contact and commission a provider of certified inspections in good time before the calibration certificate expires.

#### 6.2 Cleaning the charger

#### Danger

Danger to life due to electric shock or fire.

Water in the charger can lead to life-threatening injuries due to electric shock and fire.

- Never immerse the charger or the plug in water.
- Do not direct a jet of water, e.g., from a garden hose or high-pressure cleaner, at the charger.
- Do not place any objects filled with liquid on the charger.
- Only clean the charger with a dry or slightly damp cloth.

#### Information

Material damage caused by aggressive cleaning agents.

Aggressive cleaning agents (e.g., benzine, acetone, ethanol) can damage the housing surface.

- Use mild cleaning agents (e.g., dishwashing liquid, neutral detergent).
- Check the charger regularly for damage and dirt on the housing.
- If necessary, clean the outside of the charger with a soft, dry, or slightly damp cloth.

#### 7 Troubleshooting

#### 7.1 Performing a self-test

The charger performs an automatic self-test of its components during each start-up. In addition, the internal residual current device is checked before each charging session.

If an error is detected during the self-test, it is recorded in the error log; see Section 7.2.1 Error log. The corresponding LED behavior can be found in Section 3 Display Elements and Controls.

#### 7.2 Correcting errors

#### 7.2.1 Error log

The error log can be viewed via the charger configuration.

1. Select the error log via the "Charger settings" menu item in the charger configuration navigation.

The error log provides the following information for each error:

- Error status
- Error category
- Time of occurrence
- Error code



 Select the error in the error log to display the cause of the error as well as corrective measures. A separate screen with the corresponding information opens for the selected error.

#### Error status

The following distinct error states exist:

Error status	Definition
Active	The error persists; the cause of the error has not yet been rectified.
Passive	The cause of the error has been rectified or the error no longer persists.

#### Error categories

There are the following error categories:

Error category	Error description	
Fatal	Charging session is aborted	
	Charging is no longer possible	
	<ul> <li>Charger must be restarted; contact Customer Support if necessary</li> </ul>	
Critical	Charging session is sometimes interrupted	
	<ul> <li>Charging is not possible in most cases</li> </ul>	
	Charger can fix itself	
Non-critical	<ul> <li>Charging session sometimes encounters limitations</li> </ul>	
	Charging is possible	
	Charger can fix itself	

If at least one error is present, the error LED lights up in the corresponding color. If there are multiple errors, the error LED lights up in the color assigned to the highest error category.

#### 7.2.2 Identifying and rectifying faults

#### Information

Material damage during troubleshooting

If the fault has not been rectified despite following the troubleshooting instructions correctly, the charger has a defect.

- Do not use the charger.
- Inform the technical service.
- Select the "Charger settings" "Error list" option via the charger configuration navigation to identify the error.
- 2. Select the error from the list.
- 3. Read the detailed description carefully and rectify the fault as instructed.



In the event of an error of category fatal, the charger must usually be restarted to rectify the error. If the error can be rectified during ongoing operation, it will be displayed as active even after the cause has been rectified. This will persist until the charger is restarted.



Once the cause of the error has been rectified, the status of the error immediately changes to passive.

4. Correct the errors according to priority if several errors are displayed. Start with fatal errors followed by critical errors and lastly non-critical errors.

#### **Delete error list**

- 1. On the "Error log" screen, select the "Delete passive errors" option as soon as there are only passive errors in the error list.
- 2. Restart the charger; see Section 5.10 Restarting the charger.
- 3. Proceed with troubleshooting if the error LED does not light up white and the error list is still not empty.

#### 7.2.3 Error codes

Error code	Error category	Type of error	Corrective action
0x100000	Fatal	Self-test error of components on the power board.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100002	Fatal	Internal communication error between power controller and board components.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100003	Fatal	Self-test error of the power controller's power supply.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100004	Fatal	Self-test error of the power board peripherals' power supply.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x10000E	Fatal	Power controller has failed.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x10000F	Fatal	Comm controller has failed.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100010	Fatal	Internal software error in the power controller.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100020	Fatal	Internal software error in the comm controller.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100023	Fatal	Internal communication error on the comm board.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100026	Fatal	Faulty EEPROM memory on the comm board.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100027	Fatal	Faulty comm controller RAM memory.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100028	Fatal	Faulty eMMC memory on the comm board.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.

	Error code	Error category	Type of error	Corrective action
	0x100100	Fatal	Incorrect reference value for residual current monitoring.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x100101	Fatal	Residual current (DC) detected.	Residual currents can occur during the charging session. The charger detects these and switches itself off as a precaution. These currents can also be caused by unwanted side effects originating with the domestic installation.
				<ol> <li>2. Disconnect the charger from the vehicle or restart it</li> </ol>
				or restarch.
	0x100102	Fatal	Internal fault in the residual current monitoring sensor.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x100103	Fatal	Self-test of residual current monitoring failed.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x100104	Fatal	Earthing monitoring indicates errors.	Have a qualified electrician check in the domestic installation or determine whether the charger is earthed properly. If the error is still displayed after inspecting the installation, contact Customer Support. If earthing monitoring is not technically possible in your country or only works unreliably, deactivate it; see Section 5.9.5 Activating/ deactivating earthing monitoring.
	0x100106	Fatal	Implausible status of load relay 1.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x100107	Fatal	Implausible status of load relay 2.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x300006	Fatal	Incompatible combination of hardware version and software.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x30000F	Fatal	Incompatible combination of hardware version and software.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x300400	Fatal	Malfunction in the electricity meter.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x300401	Fatal	Connection to the electricity meter interrupted.	Restart the charger. If the error is still displayed after repeated restarts, have a qualified electrician inspect the installation of the electricity meter or contact Customer Support.
	0x401100	Fatal	Error in the phase switching sequence.	An unexpected error has occurred during phase switching from three-phase to single-phase operation or vice versa. Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
	0x401101	Fatal	Phase switching configuration error.	The charger supports phase switching for three- phase and single-phase operation; however, it is not configured correctly. Check whether three-phase operation has been set in the charger configuration. If the error is still displayed after restarting the system, contact Customer Support.

Error code	Error category	Type of error	Corrective action
0x500001	Fatal	Faulty control of LEDs.	The LED display no longer operates reliably. Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0xC00304	Fatal	Incompatible software version of power controller and comm controller.	If necessary, repeat the last software update carried out; see Section 5.12.2 <i>Manual software update</i> . If the error is still displayed after a successful software update, contact Customer Support.
0xE102A0	Fatal	Error in power board peripherals.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0xFF0103	Fatal	Temperature sensor on the power controller outside the valid range.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0xFF0203	Fatal	Temperature sensor on the relay outside the valid range.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0xFF0303	Fatal	Temperature sensor in the input path or at the input of load relay 1 outside the valid range.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0xFF0403	Fatal	Temperature sensor in the output path or at the output of load relay 2 outside the valid range.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x200200	Critical	Implausible voltage on the control line to the vehicle.	Check the status of your vehicle for proper function and check the charging cable.
0x200201	Critical	Vehicle requests ventilation.	The vehicle is requesting ventilation. As this is not supported by the charger, the charger cannot be used to charge this vehicle.
0x402000	Critical	OCPP configuration incorrect.	Check and correct the OCPP configuration and contact the CPO (charging station operator) if the problem persists.
0x402001	Critical	Certificate for logging in via OCPP is missing or invalid.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x402003	Critical	Charger not authorized for OCPP.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0xC00201	Critical	Internal communication error between power board and comm board.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0xD1210A	Critical	Internal communication error on the comm controller.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0xD20001	Critical	Internal communication error between power board and comm board.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.

Error code	Error category	Type of error	Corrective action
0xE10202	Critical	Overvoltage on phase L1.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
0xE10203	Critical	Undervoltage on phase L1.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
0xE10212	Critical	Overvoltage on phase L2.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
0xE10213	Critical	Undervoltage on phase L2.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
0xE10222	Critical	Overvoltage on phase L3.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
0xE10223	Critical	Undervoltage on phase L3.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
0xE10231	Critical	Input current on phase L1 too high.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
0xE10241	Critical	Input current on phase L2 too high.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.

Error code	Error category	Type of error	Corrective action
0xE10251	Critical	Input current on phase L3 too high.	Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
0xE10300	Critical	Frequency of the electrical connection outside the permissible range.	If there is a fault with the house grid connection, the charger cannot be operated until the fault has been rectified. Have the installation checked by a qualified electrician. The electrical connection in particular must be checked and repaired if necessary (high-voltage resistance measurement, visual inspection for kinks, crushing, etc.). If the installation is not free of faults or done correctly, contact Customer Support.
OxFF0101	Critical	Charging is not possible due to low temperature (sensor on the power controller).	Wait until the charger has warmed up to a sufficient operating temperature. Ensure that the ambient temperature is not too low and is within the operating range of the charger.
0xFF0104	Critical	Charging is not possible due to critical temperature (sensor on the power controller).	Wait until the charger has cooled down to a sufficient operating temperature. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.
0xFF0201	Critical	Charging is not possible due to low temperature (sensor on the relay).	Wait until the charger has warmed up to a sufficient operating temperature. Ensure that the ambient temperature is not too low and is within the operating range of the charger.
0xFF0204	Critical	Charging is not possible due to critical temperature (sensor on the relay).	Wait until the charger has cooled down to a sufficient operating temperature. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.
0xFF0301	Critical	Charging is not possible due to low temperature (sensor in the input path or at the output of load relay 1).	Wait until the charger has warmed up to a sufficient operating temperature. Ensure that the ambient temperature is not too low and is within the operating range of the charger.
0xFF0304	Critical	Charging is not possible due to critical temperature (sensor in the input path or at the output of load relay 1).	Wait until the charger has cooled down to a sufficient operating temperature. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.
0xFF0401	Critical	Charging is not possible due to low temperature (sensor in the output path or at the input of load relay 2).	Wait until the charger has warmed up to a sufficient operating temperature. Ensure that the ambient temperature is not too low and is within the operating range of the charger.

Error code	Error category	Type of error	Corrective action
0xFF0404	Critical	Charging is not possible due to critical temperature (sensor in the output path or at the output of load relay 2).	Wait until the charger has cooled down to a sufficient operating temperature. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.
0XD20002	Critical	Internal communication error between power board and comm board during start-up.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x403005	Critical	Error when updating the software part of the power controller.	Restart the update. If the error is still displayed after attempting the update again, contact Customer Support.
0x100025	Non-critical	Temperature compensation of the LEDs has failed.	Restart the charger. Operation of the charger is still possible, but the color of the LEDs may not correspond to the description in this manual. If necessary, use the charger configuration to determine the correct system status.
0x100029	Non-critical	The degree of wear of the flash memory has reached 50 percent.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.
0x100030	Non-critical	Memory space allotted to user-defined data is full.	Delete unneeded or outdated user-defined data, such as entries in the vehicle authorization list, to free up storage space. This can be done via the charger configuration settings.
0x100031	Non-critical	Memory space allotted to charging session data is full.	Delete unneeded or outdated charging session data to free up storage space. This can be done via the charger configuration settings.
0x10010D	Non-critical	Earthing monitoring deactivated.	Earthing monitoring has been deactivated via the charger configuration. Please refer to the "Activating/deactivating earthing monitoring" section for information on how to activate this feature.
0x300000	Non-critical	Wi-Fi module self-test failed.	Restart the charger. If the error is still displayed after repeated restarts, set up an alternative network connection.
0x300001	Non-critical	Wi-Fi connection error.	Check whether the Wi-Fi signal strength is sufficient for a connection and ensure that you have entered the correct access data. If necessary, restart the Wi-Fi access point in your network.
0x300100	Non-critical	Ethernet module self-test failed.	Restart the charger. If the error is still displayed after repeated restarts, set up an alternative network connection.
0x300101	Non-critical	Ethernet connection error.	Check cables, switch, network configuration, and security settings on the connected router. Alternatively, use a different network connection.
0x300200	Non-critical	LTE module self-test failed.	Restart the charger. If the error is still displayed after repeated restarts, set up an alternative network connection.

Error code	Error category	Type of error	Corrective action
0x300201	Non-critical	LTE connection or authentication error.	For example, use a smartphone to check whether LTE reception in the vicinity of the charger is adequate in terms of the signal strength. Ensure that the access data has been entered correctly. Alternatively, use a different network connection.
0x300202	Non-critical	LTE signal strength too low.	Wait until a signal level of sufficient strength is available or switch to Ethernet or Wi-Fi if necessary. Check the location of your charger and make sure that it is not blocked by obstacles that affect the LTE signal. If reception conditions are inadequate, use an LTE repeater if necessary.
0x300300	Non-critical	Faulty RFID module.	Restart the charger. If the error is still displayed after starting the charger again, charging can only be authorized using one of the other authentication options or by disabling authentication. If the RFID module is still not working correctly, contact Customer Support.
0x300301	Non-critical	RFID card invalid or unreadable.	<ul> <li>Check</li> <li>whether the RFID card is shown in the authorization list and register the card.</li> <li>to make sure you are using a functioning RFID card that meets the supported standards as described in these instructions.</li> <li>Hold the RFID card sufficiently close to the labeled sensor and wait for visual feedback from the charger before removing the RFID card from the sensor.</li> </ul>
0x40100C	Non-critical	Attempt to establish vehicle communication via PLC has failed.	The charger could not establish communication with the vehicle via ISO 15118 (PLC). Check whether the vehicle supports this extended communication mode and ensure that it has been activated. Check the charging cable. Alternatively, you can resort to basic charging.
0x40100E	Non-critical	Vehicle error (matching error).	The charger identified an ISO 15118-capable vehicle and established a connection, but it was unable to start the protocol. Check the configuration on the vehicle. This error mainly occurs when the vehicle is set to DC charging. Alternatively, you can resort to basic charging.
0x40100F	Non-critical	Vehicle error (sequence error).	The charger identified an ISO 15118-capable vehicle and established a connection, but it was unable to start the protocol. Check the configuration on the vehicle. This error mainly occurs when the vehicle is set to DC charging. Alternatively, you can resort to basic charging.
0x401011	Non-critical	Vehicle error (invalid session ID).	The charger identified an ISO 15118-capable vehicle and established a connection, but it determined that the protocol used is incompatible. Check the configuration on the vehicle. Alternatively, you can resort to basic charging.

Error code	Error category	Type of error	Corrective action
0x401012	Non-critical	Vehicle error (invalid service ID).	The charger identified an ISO 15118-capable vehicle and established a connection, but it determined that the protocol used is incompatible. Check the configuration on the vehicle. Alternatively, you can resort to basic charging.
0x401013	Non-critical	Vehicle error (invalid payment method).	The charger identified an ISO 15118-capable vehicle and established a connection, but it was unable to detect a suitable payment method. If you want to use the vehicle for Plug & Charge, check whether a suitable certificate is installed on the vehicle. Alternatively, you can resort to basic charging.
0x401014	Non-critical	Vehicle error (service selection).	The charger identified an ISO 15118-capable vehicle and established a connection, but it determined that the protocol used is incompatible. Check the configuration on the vehicle. Alternatively, you can resort to basic charging.
0x401015	Non-critical	Plug & Charge certificate has expired.	The charger identified a Plug & Charge-capable vehicle and established a connection, but it detected an invalid certificate. Contact the manufacturer or dealer of your vehicle to update the invalid certificate. Alternatively, you can resort to basic charging.
0x401016	Non-critical	Plug & Charge certificate has been revoked.	The charger identified a Plug & Charge-capable vehicle and established a connection, but it detected a certificate that is no longer valid. Contact the manufacturer or dealer of your vehicle to update the invalid certificate. Alternatively, you can resort to basic charging.
0x401017	Non-critical	Plug & Charge certificate missing.	The charger identified a Plug & Charge-capable vehicle and established a connection, but it could not find a certificate. Contact the manufacturer or dealer of your vehicle to obtain a suitable certificate for the Plug & Charge feature. Alternatively, you can resort to basic charging.
0x401018	Non-critical	Plug & Charge: Error when processing the certificate.	The charger identified a Plug & Charge-capable vehicle and established a connection, but it could not find a certificate. Contact the manufacturer or dealer of your vehicle and inquire about the status and validity of your certificate. Alternatively, you can resort to basic charging.
0x40101A	Non-critical	Plug & Charge: Error when processing the certificate (invalid challenge).	The charger identified a Plug & Charge-capable vehicle and established a connection, but it could not find a certificate. Contact the manufacturer or dealer of your vehicle to obtain a suitable certificate for the Plug & Charge feature. Alternatively, you can resort to basic charging.
0x40101B	Non-critical	Vehicle error (incorrect energy transfer method).	The charger identified an ISO 15118-capable vehicle and established a connection, but it determined that the protocol used is incompatible. Check the configuration on the vehicle. Alternatively, you can resort to basic charging.

Error code	Error category	Type of error	Corrective action
0x40101C	Non-critical	Vehicle error (incorrect charging parameters).	The charger identified an ISO 15118-capable vehicle and established a connection, but it determined that the protocol used is incompatible. Check the configuration on the vehicle. Alternatively, you can resort to basic charging.
0x40101D	Non-critical	Vehicle error (invalid charging profile).	The charger identified an ISO 15118-capable vehicle and established a connection, but it determined that the protocol used is incompatible. Check the configuration on the vehicle. Alternatively, you can resort to basic charging.
0x40101E	Non-critical	Vehicle error (invalid rate selection).	The charger identified an ISO 15118-capable vehicle and established a connection, but it determined that the protocol used is incompatible. Check the configuration on the vehicle. Alternatively, you can resort to basic charging.
0x401020	Non-critical	Vehicle error (no charging service selected).	The charger identified an ISO 15118-capable vehicle and established a connection, but it determined that the protocol used is incompatible. Check the configuration on the vehicle. Alternatively, you can resort to basic charging.
0x401025	Non-critical	Error when establishing the connection to the vehicle via TCP.	The charger identified an ISO 15118-compatible vehicle, but it could not establish a connection. Check the configuration on the vehicle or repeat Plug & Charge by disconnecting and reconnecting the charging cable. Alternatively, you can resort to basic charging.
0x401026	Non-critical	Vehicle error (connection to the vehicle via PLC was terminated).	There has been a timeout while an existing connection to the vehicle via PLC, and the charger has switched to basic charging. Unplug and then reconnect the charging cable. Alternatively, you can resort to basic charging.
0x401027	Non-critical	Connection to the Energy Management System (EMS) terminated.	Check whether the EMS is switched on and connected to your network. Either an Ethernet or Wi-Fi connection is required; a connection via LTE is not possible. If necessary, also check the security settings in your network.
0x401028	Non-critical	Energy Management System: Service for blackout protection is not available.	Check the configuration of your Energy Management System.
0x401029	Non-critical	Energy Management System: Service for charging using home- generated power is not available.	Check the configuration of your Energy Management System and your solar panels.
0x40102A	Non-critical	Energy Management System: Service for cost- optimized charging is not available.	Check the rate settings of your Energy Management System.
0x402002	Non-critical	Connection to the OCPP server was terminated.	Check the server connection. Any active charging session will be continued.

Error code	Error category	Type of error	Corrective action
0x402004	Non-critical	Charging authentication via OCPP has failed. LED status: authentication rejected.	Check whether you have used the correct means of authentication (RFID card) and/or whether the vehicle used has been authorized for the charger.
0x402005	Non-critical	Request from the OCPP server not supported.	Has no effect on active or future charging sessions. Contact Customer Support if necessary.
0x402006	Non-critical	Unknown data received from OCPP server.	Has no effect on active or future charging sessions. Contact Customer Support if necessary.
0x403000	Non-critical	Software update server not available.	Check the network connection of the charger to ensure that it is properly connected to the internet. Restart the update. If the error is still displayed after attempting the update again, contact Customer Support.
0x403001	Non-critical	Software download could not be initiated.	Check the network connection of the charger to ensure that it is properly connected to the internet. Restart the update. If the error is still displayed after attempting the update again, contact Customer Support.
0x403002	Non-critical	Timeout during software download.	Check the network connection of the charger to ensure that it is properly connected to the internet. Restart the update. If the error is still displayed after attempting the update again, contact Customer Support.
0x403003	Non-critical	Downloaded software image invalid or corrupted.	Restart the update. If the error is still displayed after attempting the update again, contact Customer Support.
0x403004	Non-critical	Error when updating the software part of the comm controller.	Restart the update. If the error is still displayed after attempting the update again, contact Customer Support.
0x403006	Non-critical	Unauthorized software downgrade requested.	Check the current software version of the charger and compare it with the versions recommended or supported by the manufacturer. Restart the update. If the error is still displayed after attempting the update again, contact Customer Support.
0x500000	Non-critical	Light sensor failed.	Restart the charger. If the error is still displayed after restarting, the device can still be operated. However, the brightness of the LEDs may not be adjusted to the brightness of the surroundings. If required, set the desired brightness manually in the charger configuration.
0xFF0102	Non-critical	Reduced charging current due to high temperature (sensor on the power controller).	Allow for a longer charging time. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.
0xFF0202	Non-critical	Reduced charging current due to high temperature (sensor on the relay).	Allow for a longer charging time. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.

Error code	Error category	Type of error	Corrective action
0xFF0302	Non-critical	Reduced charging current due to high temperature (sensor in the input path or at the output of load relay 1).	Allow for a longer charging time. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.
0xFF0402	Non-critical	Reduced charging current due to high temperature (sensor in the input path or at the output of load relay 2).	Allow for a longer charging time. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.
0xFF0902	Non-critical	Reduced charging current due to high temperature (sensor on the comm controller).	Allow for a longer charging time. Ensure that the ambient temperature is not excessively high. If the charger is installed in a location where it is exposed to direct sunlight or where there is little air circulation, this can lead to high temperatures.
0xFF0903	Non-critical	Temperature sensor on the comm controller outside the valid range.	Restart the charger. If the error is still displayed after repeated restarts, contact Customer Support.

#### 7.3 Initiating emergency measures

Emergency measures may only be initiated by a certified electrician.

#### Danger

Contact with live parts poses an immediate risk to life due to electrocution.

- Observe the following safety rules in an emergency, while performing troubleshooting, or when carrying out electrical work on the charger:
  - · De-energize the charger.
  - $\cdot$  Check that there is no voltage present.
  - · Secure it against being switched on again.
  - $\cdot$  Ground and short-circuit the charger.
  - Cover adjoining live parts and secure the danger area.

If you encounter an emergency situation, such as when the charger or parts of the charger suffer water damage or are damaged by vandalism, proceed as follows:

- 1. Observe all safety rules listed on the warning notice to ensure that there is no voltage present.
- 2. Contact Customer Support.

#### 8 Shutting Down the Charger

#### ! Warning

Risk of injury and damage to property if personnel are not adequately trained or qualified.

This can result in serious injuries and damage to property.

 Only trained and suitably qualified personnel may work on the charger.

#### Warning

Risk of injury due to improper disassembly.

Errors made during disassembly can lead to lifethreatening situations and may result in severe damage to property.

· Observe all instructions on disassembly.

#### 8.1 Taking the charger out of service

- Reset the charger to its factory settings. All personal data and any local backup copies will be deleted from the system.
- 2. For assistance, contact Customer Support if necessary.

#### 8.2 Disassembling the charger

The charger may only be disassembled by a certified electrician.

#### Danger

Contact with live parts poses an immediate risk to life due to electrocution.

- Observe the following safety rules in an emergency, while performing troubleshooting, or when carrying out electrical work on the charger:
  - · De-energize the charger.
  - · Check that there is no voltage present.
  - · Secure it against being switched on again.
  - $\cdot$  Ground and short-circuit the charger.
  - Cover adjoining live parts and secure the danger area.
- 1. Observe all safety rules listed on the warning notice to ensure that there is no voltage present.
- 2. Remove the cover and the front panel.
- 3. Remove the wires of the supply cable from the terminal clamps.
- 4. Detach the charger from the fastening screws it is mounted on.
- 5. Store or dispose of the charger.

### 9 Appendix

#### 9.1 Legal notice

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## Conformity with German Standard Weights and Measures Law

During production, the manufacturer affixes the manufacturer's seal near the meter that complies with the German Standard Weights and Measures Law. The seal ensures that any tampering with the wiring or the built-in electricity meter can be detected. The manufacturer's seal must not be removed or damaged while the charger is in use.

Damage to the legal-for-trade seal or damage to or removal of the user seal will immediately invalidate the charger's conformity with the German Standard Weights and Measures Law, irrespective of the expiry of the statutory period for legal-for-trade inspections.

If the manufacturer's seal is broken, it is prohibited to affix a new seal without the supervision of the calibration authority or a representative of the calibration authority.

• Observe the deadlines for legal-for-trade inspections of electricity meters.

#### **Privacy policy**

Use of the charger requires that we process your personal data. Information on data processing, on your rights as a data subject, and contact details can be found in our privacy policy at https://www.elli.eco/ en/downloads or can be accessed via the QR code.



#### 9.2 Product features

CE	The charger and the enclosed charging cards have been CE- certified by the manufacturers and bear the CE logo. The accompanying declarations of conformity can be found at https://www.elli.eco/downloads/.
RoHS Compliant	The charger and the enclosed charging card are in compliance with the RoHS Directive (Directive 2011/65/EU). The accompanying declarations of conformity can be obtained from the manufacturer.

#### 9.3 Storage

- 1. Clean the charger before putting it into storage.
- 2. Store the charger in its original packaging or other suitable packaging in a clean and dry place.
- 3. Observe the permissible storage temperatures. For more information on this, refer to the technical data sheet.

#### 9.4 Disposal



Dispose of the appliance in accordance with the applicable local disposal regulations.

Electric and electronic equipment (EEE) is marked with the symbol of a crossed-out wheeled bin. This indicates that the corresponding EEE must be collected and disposed of separately from regular domestic waste at the end of its service life. As the end-user, you are legally obligated to separate collection.

Electric/electronic equipment can be returned free of charge to local collection points in your area. The addresses of collection points can be obtained from your local or municipal council.

It is your responsibility to delete any personal data found on WEEE.

If your WEEE contains removable/rechargeable batteries or lamps, remove them prior to disposing of the WEEE and take them to a separate collection facility.

Electrical and electronic equipment contains substances that are potentially hazardous to the environment and human health. Therefore, ensure proper disposal and check beforehand if there are measures available to prevent or avoid waste, such as reparability or alternative uses, and opt for refurbishment, upgrading, or replacement of individual components or return the WEEE to a reuse facility instead of final disposal in order to play your part in protecting the environment. In Germany: Retailers with a sales area designated for EEE of at least 400 square meters and food retailers with a total sales area of at least 800 square meters are obligated to take back WEEE free of charge if they offer EEE several times a year or on a permanent basis and make it available on the market. In the case of distribution using means of distance communication, the retailer's sales area shall include all storage and dispatch areas.

When supplying a new EEE to an end-user, distributors must take back free of charge, at the point of supply or in the immediate vicinity thereof, a WEEE of the equivalent type that largely fulfills the same functions as the new EEE.

Free return of up to three (3) electric or electronic devices per type of device, if no external dimension exceeds 25 centimeters, is also possible in the retail shop or in its immediate vicinity without the purchase of new EEE.

Find out if there are similar regulations in place in your country (if you reside outside of the United States).

Information regarding the fulfillment of the "quantitative targets" (collection and recycling rates) in Germany set out in Section 10(3) of the ElektroG (Elektro- und Elektronikgerätegesetz – Electrical and Electronic Equipment Act) and Section 22(1) of the ElektroG can be found at: https://www.bmuv.de/themen/wasser-ressourcen-abfall/ kreislauf wirtschaft/statistiken/ elektro-und-elektronikaltgeraete



Recycling conserves raw materials and energy and makes a major contribution to environmental protection.

## 9.5 Glossary

Abbreviations	Definition
°C	Celsius
°F	Fahrenheit
А	Ampere
AC	Alternating current
СОМ	COM software
СРО	Charging point operator
DC	Direct current
DHCP	Communication protocol, Dynamic Host Configuration Protocol
ELS	Earth leakage sensor
EMS	Energy Management System
EVSE ID	Identification number, Electric Vehicle Supply Equipment
GHz	Gigahertz
HEMS	Home Energy Management System
Hz	Hertz
ICCID	Integrated Circuit Card Identifier Network
IMEI	International Mobile Equipment Identity
IMSI	International Mobile Subscriber Identity
IP	Internet Protocol
kW	Kilowatt
LED	Light emitting diode
LTE	Long Term Evolution
mA	Milliampere

Abbreviations	Definition
MID	Measuring Instruments Directive
NFC	Near Field Communication, contactless data transmission
OCPP	Open Charge Point Protocol
PIN	Personal identification number
PLC	Power Line Communication
PSK	PSK encryption
PUK	Electronic key, personal unblocking key
PV	Photovoltaics
PWR	PWR software
RFID	Radio frequency identification
SIM	Subscriber Identity Module, chip card
SoC	State of charge of the battery
SSID	Network name, Service Set Identifier
TLS	Transport Layer Security
UUID	Standard identification number, Universally Unique Identifier
V	Volt
V2G	Vehicle-to-grid
WEP	Encryption protocol, Wired Equivalent Privacy
Wi-Fi	Also known as wireless local area network (WLAN)
WPA	Wi-Fi Protected Access

9 Appendix

Škoda Charger is distributed by **Elli – a brand of the Volkswagen Group** Volkswagen Group Charging GmbH Karl-Liebknecht-Str. 32 10178 Berlin Germany

www.elli.eco

### Customer Support

https://www.elli.eco/en/contact

