

OlifeEnergy Wallbox

Installation Manual for Charging Station for Electric Cars



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1 LIST OF CONTENTS

2	Information on documents	4
2.1	transport instructions	4
3	product characteristics	5
4	connection of OlifeEnergy Wallbox charging station.....	6
5	recommended wiring diagram.....	6
6	dimensions	7
7	Installation	8
7.1	overview.....	8
7.2	range of delivery	9
7.3	list of materials for installation of the charging station.....	9
7.4	installation of charging station	9
	STEP 1: Disconnect the power supply and check the voltage	10
	Disconnect the power lead-in cable from the power supply before installation. Check that the supply cable is not live.	10
	STEP 2: Open the front cover	10
	STEP 3: Wallbox installation on the wall.....	11
	STEP4: Connections of data conductors	12
	STEP 5: Connection of power conductors.....	14
	STEP 6: Connection of data (Ethernet) UTP cable/GSM modem.....	14
	STEP 7: Charging station checking	15
	STEP 8: Wallbox setup.....	15
	STEP 9: Chassis closing and functionality checking.....	15
8	wallbox setup	16
8.1	Adjustment of maximum charging current.....	16
8.2	Automatic charging setup.....	17
9	Mobile app	17
	Connection to the Olife Energy charging station.....	18
10	Reset to factory defaults.....	19
11	RFID	20
11.1	Description	20
11.2	Technical parameters.....	20
11.3	RFID reader's cards and chips management	20

	Adding an RFID card to local database:	20
	Deleting the RFID card:	21
12	Charging station control via RS485 – MODBUS RTU.....	22
13	Control of charging current through analogue signal.....	24
14	HDO connection.....	25
15	operating instructions.....	26
15.1	Charging station with charging cable	26
15.2	charging station with socket	26
16	description of LED indication	28
17	OCPP Configuration.....	29
17.1	Description	29
17.2	Procedure.....	29
18	EQUIPMENT INSPECTION.....	29
18.1	VISUAL INSPECTION BEFORE EACH CHARGING	29
18.2	regular service inspection	30
	Recommended points of inspections	30
19	failure detection and troubleshooting.....	30
20	Information for users on the disposal of electrical and electronic devices.....	32
20.1	Households	32
20.2	Use in companies	32
21	Contact to producer	32

2 INFORMATION ON DOCUMENTS

The following instructions guide you through the documentation. We are not liable for any damage caused by failure to follow these instructions.

1. Parts of documentation

For operators of the equipment:

- Operating instructions for the charging station

For a service technician:

- Manual for installing and setting up the charging station
- Instructions regarding regular service inspections

2. Archiving of documents

This Installation Manual as well as all the relating documents and needful aids shall be handed over to the operator of the equipment. The operator shall be responsible for storing all these instructions and aids so that these are available if required.

3. Symbols used

The symbols, mentioned in the text, have the following meaning:

Immediate threat to life



Risk of serious injuries

Risk of light injuries



Risk of material damages



Symbol for useful instructions and information

2.1 TRANSPORT INSTRUCTIONS



Caution!

Danger of damage to end connectors of charging cables!

- Ensure that the end connectors of the charging cables are fastened to the chassis and fitted with a protective element when being transported.
-



Caution!

Danger of damage to the charging station!

The control electronics of the charging station is sensitive to conductive dust particles and moisture.

- Always transport the charging station fully assembled.

The charging station is delivered in a single package.

- Transport the charging station to the place of installation. During the transport, the charging station should be packed in its protective packaging.

3 PRODUCT CHARACTERISTICS

OlifeEnergy Wallbox is a charging station of electric cars, which complies with the standard IEC 61851. The station is an electric device. This should be connected by a person who is qualified and according to the legislation in force. The operating instructions must be followed to ensure a safe operation. Failure to observe the instructions may result in the risk of injury or damage. The station can charge one electric vehicle by one to three phase connection (depending on the 230/400 V connection) with an alternating current of 6 – 32 A.

The charging cycle can be started automatically when the vehicle is connected, or based on authorization with an RFID chip. The station includes a RFID reader.

Charging can be completely controlled by an external system using the ModBus RTU protocol over RS485 bus bar. In addition to the ModBus RTU, the charging power of the station can also be controlled by a 0 – 10 V analogue signal. For the dynamic control of charging power based on consumption or production (PV, cogeneration, ...), use the OlifeEnergy Smartmeter unit.

In the SMART variant, the station can be partially or completely controlled from a remote server using the OlifeEnergy Cloud service or the OCPP protocol.

4 CONNECTION OF OLIFEENERGY WALLBOX CHARGING STATION

The charging station must be connected to a fixed installation, it is not equipped with moving lead-in cables. In the case of a publicly accessible charging station, the upstream installation must contain an overvoltage protection device according to ČSN 33 2000-7-722. The station includes a device to detect the direct element pursuant to EN 62196. A suitable circuit breaker and a residual current protector must be located upstream of the station. The following diagram shows the recommended wiring of one OlifeEnergy Wallbox charging station according to EN 61851-1 ed.3

5 RECOMMENDED WIRING DIAGRAM

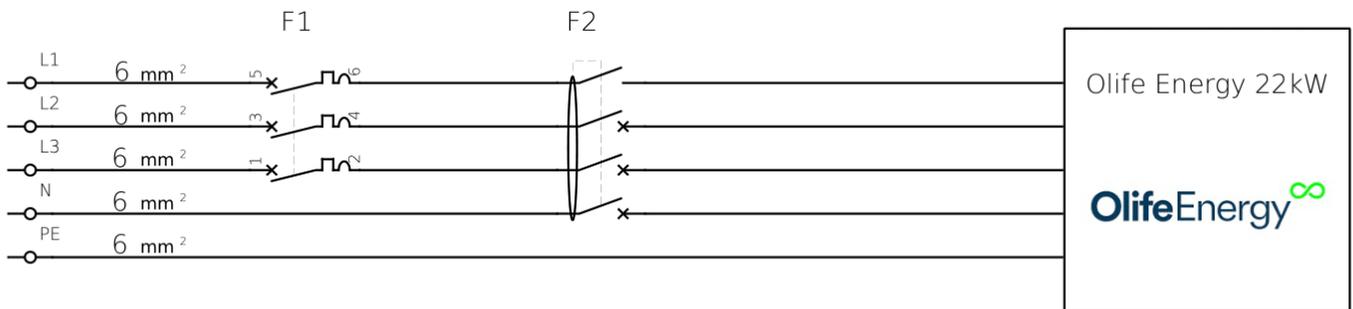


Fig. 1:Wiring diagram

F1 – Circuit breaker 3x32 A, tripping characteristics B

F2 – Residual current protector 4x40 A, type A, 30 mA



Attention! The wiring can may vary slightly according to national or local regulations. Always discuss wiring with your local inspection engineer or designer.

6 DIMENSIONS

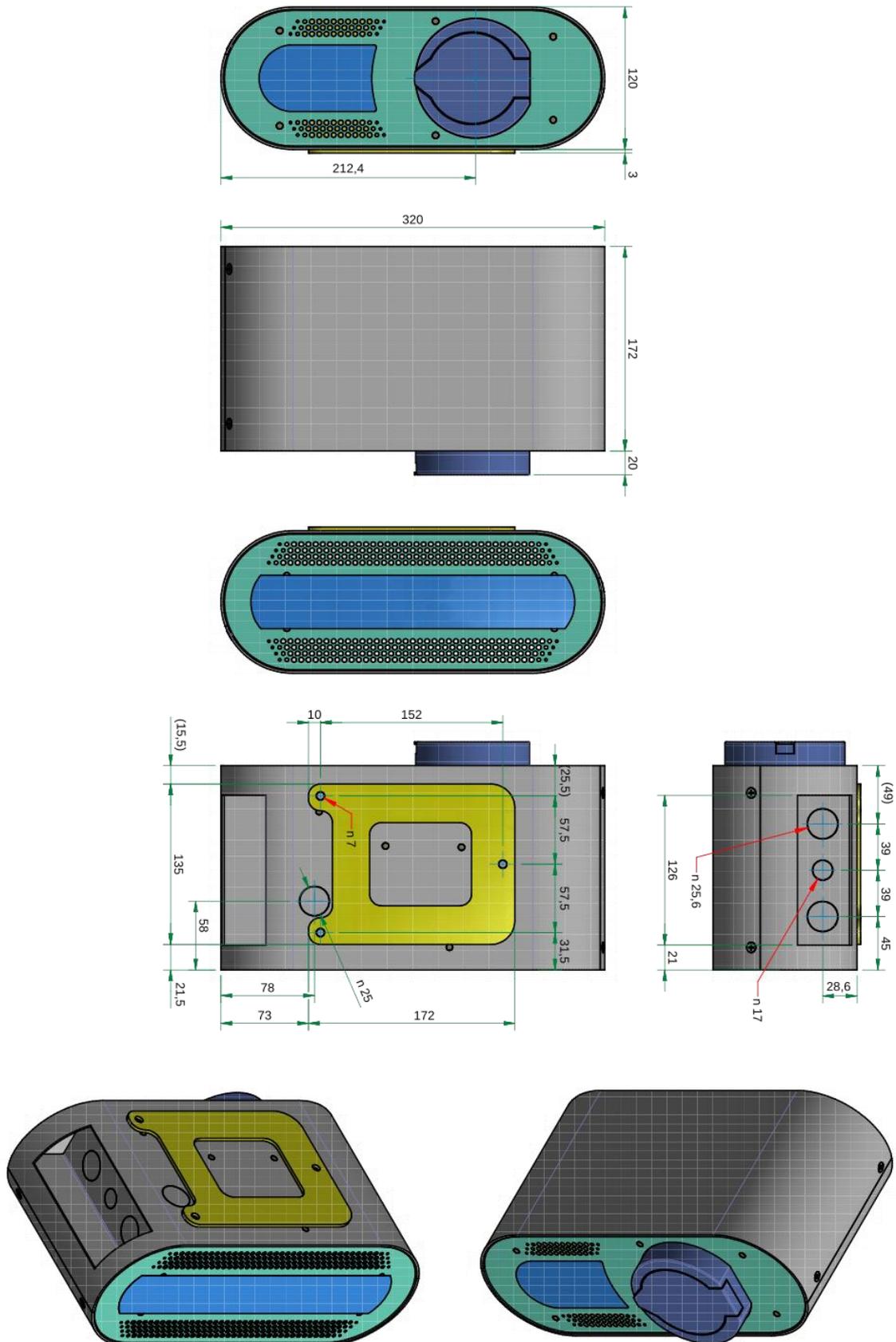


Fig. 2: Dimensions of Olife Energy AC-22 charging station

7 INSTALLATION

7.1 OVERVIEW

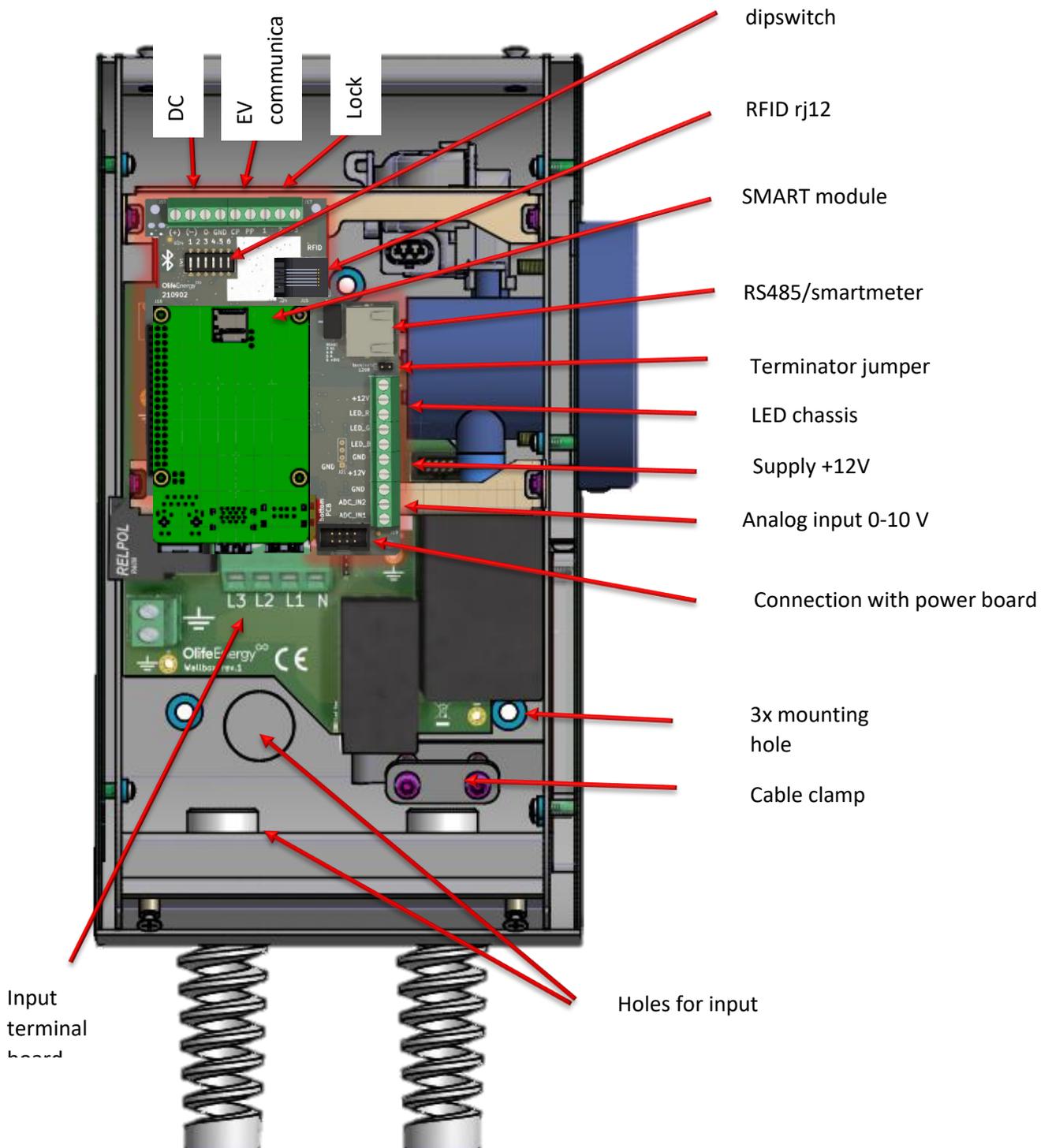


Fig. 3: Wallbox overview

7.2 RANGE OF DELIVERY



Pc	olife Energy AC-22 kW charging station
1	OlifeEnergy Wallbox 22kW
1	Charging cable, type 1/2 or socket
3	Sealing washers
1	Pad/template

Fig. 4:OlifeEnergy Wallbox 22 kW

7.3 LIST OF MATERIALS FOR INSTALLATION OF THE CHARGING STATION

Material/Tools	Size	Description
Torx screw (or drill bit)	TX20	
Flat-head screwdriver (or drill bit)	5	
Connecting materials (ideally with Allen key or Torx head) and tools for wall or post mounting		
Optionally – water level, pencil, rule, drill		

7.4 INSTALLATION OF CHARGING STATION



Danger!

Unprofessional installation can cause danger to persons or damage to property!

Possible risk of personal injury and material damage to the charging station if installed without the prescribed instructions.



Caution!

Danger of damage to the control electronics of the charging station!

While installing the charging station, avoid any contact of liquids and conductive objects with internal parts of the control electronics. This could cause degradation or a conductive connection between contacts, which could cause a short circuit at the connection point or damage the station.

- Always follow the Manual while installing the station



The following section will describe particular steps for installing the charging station. Following the sequence of steps will ensure safe installation of the charging station.

STEP 1: Disconnect the power supply and check the voltage

Disconnect the power lead-in cable from the power supply before installation. Check that the supply cable is not live.

STEP 2: Open the front cover

- Unscrew the 4 screws and remove the front cover as shown below:



Installation tools	
Size	Type
TX20	

Fig. 5: Cover removal

STEP 3: Wallbox installation on the wall

- Place the steel pad (yellow section in Fig. 6) to the required spot on the wall.
- Use the water level to even the pad and mark spots to drill holes.
- Drill 3 holes.
- According to the type of construction material of the wall choose a suitable fixing method (dowels, threaded rods $\phi 6\text{mm}$, etc.)
- Fix the station to the wall using sealing washers for screw heads and the steel pad.

CAUTION! Do not forget to use sealing washers that are part of the delivery.

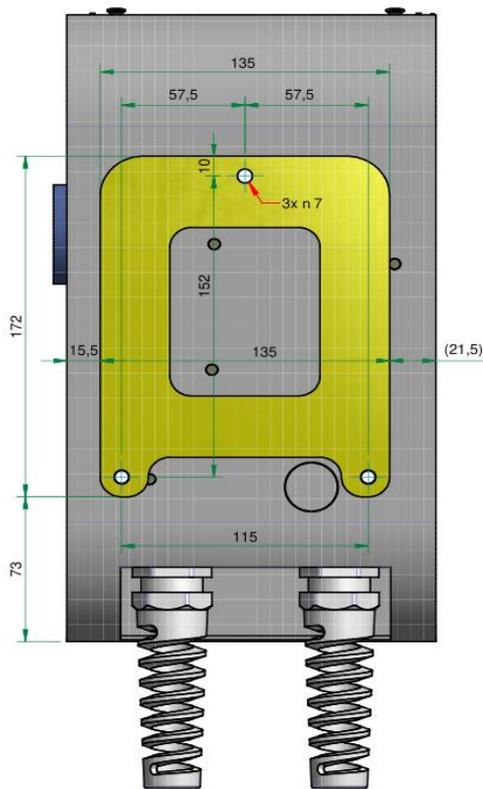


Fig. 6: Wallbox rear side with a pad

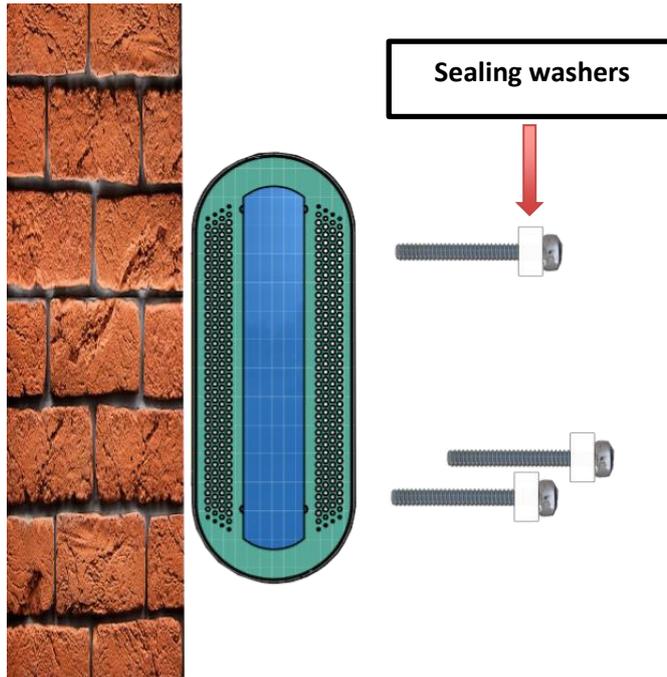


Fig. 7: Installation of Wallbox on the wall

STEP4: Connections of data conductors

- Pull the power supply conductor either through the left bottom bushing, or through the rear side of the chassis, see Fig. 8.

- For SMART version pull the network (Ethernet) cable through the middle bushing.

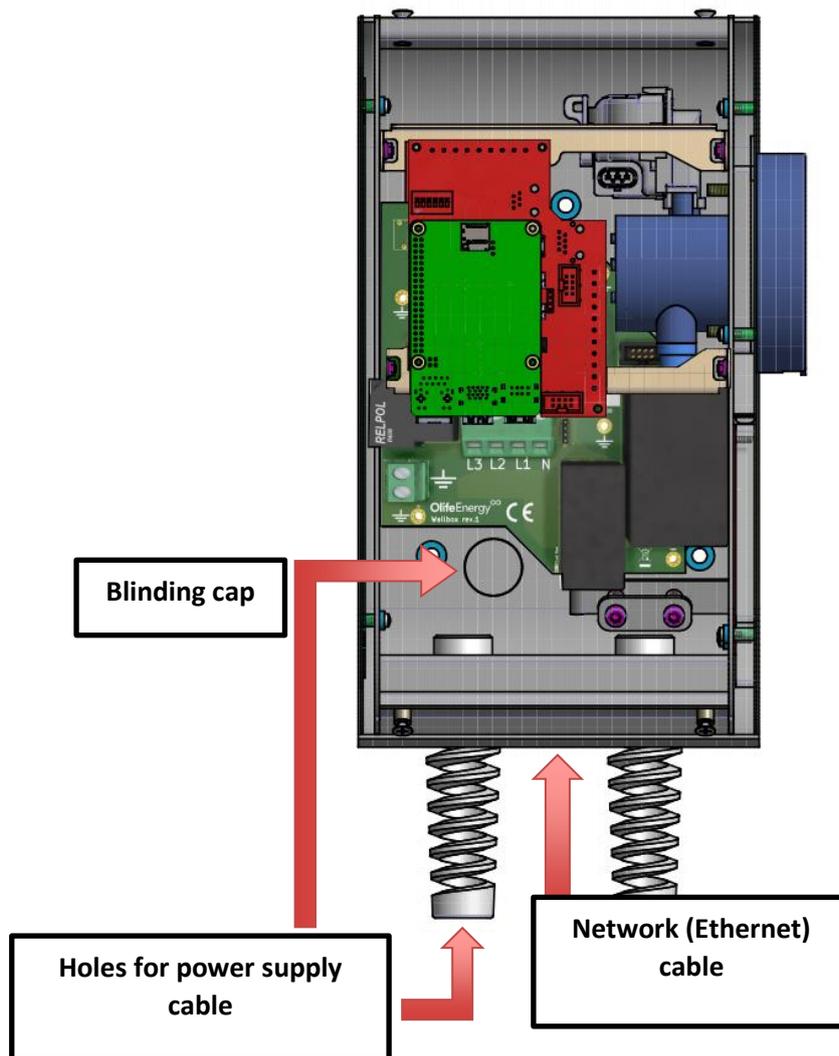


Fig. 8: Front side of opened Wallbox



To install the power supply cable or the network cable, it is necessary to remove the blinding cap. To remove it, push the blinding cap edge with great force; this causes the blinding cap to break out. If not, knock the edge with an impact screwdriver and a hammer.



CAUTION! Prior to the power supply cable, a circuit breaker with tripping characteristics B or C, with max. tripping value 32A and with a residual current protector, type A, with min. nominal current of 40A, see standard IEC 61851 ed.3, must be mounted.

STEP 5: Connection of power conductors

- Connect the power conductors as shown below.
- Apply the torque of approx. 1 to 1,2 Nm

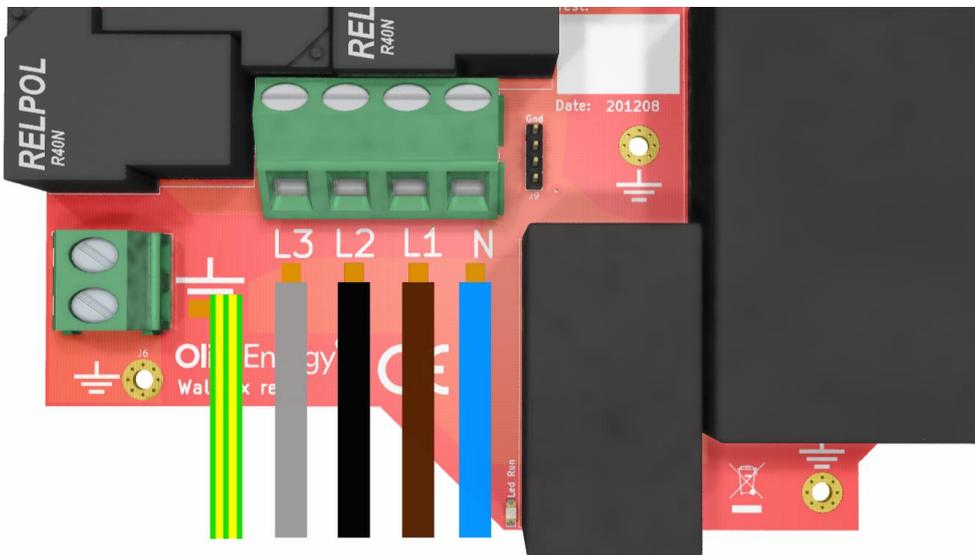


Fig. 9: Connection of lead-in conductor

STEP 6: Connection of data (Ethernet) UTP cable/GSM modem



This step concerns only the SMART version. The connection using a network cable (Ethernet) is given priority to the connection through the GSM network.

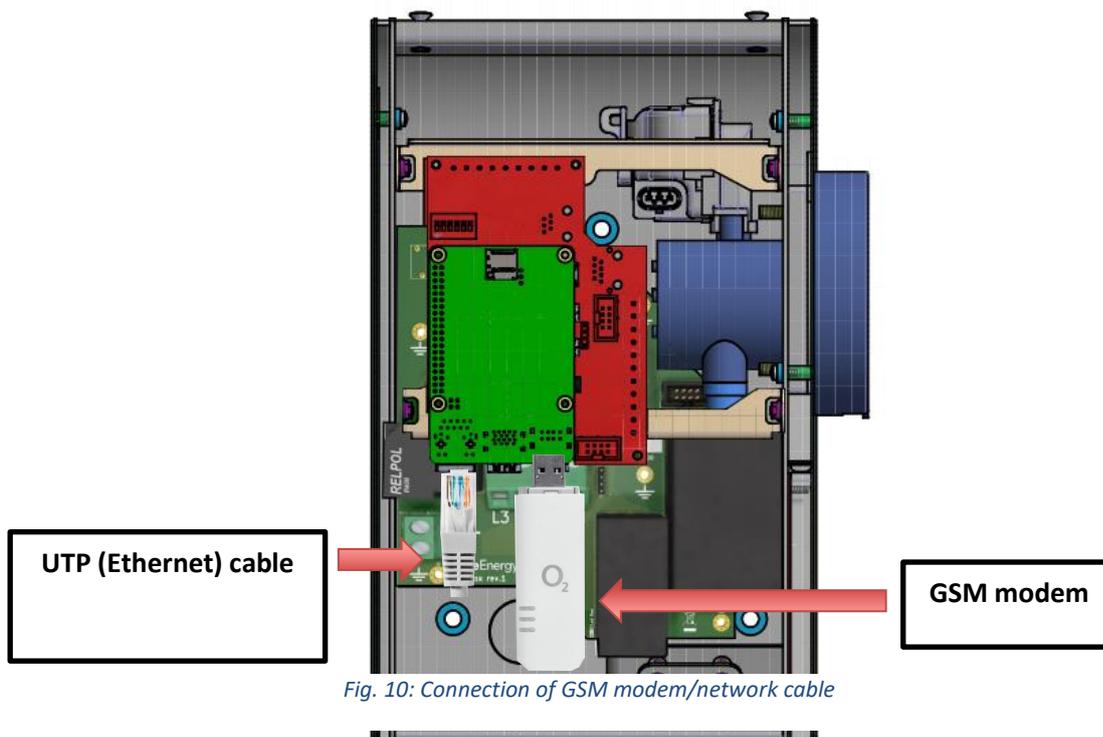


Fig. 10: Connection of GSM modem/network cable

STEP 7: Charging station checking

Check the station before and after connection and only when the whole set is not live. The device must be checked to verify that the permanently connected electric items:

- comply with safety requirements of corresponding standards
- have been chosen and installed properly
- have no visible damages
- have been chosen properly due to their current carrying capacity and voltage drop
- protective and zero wires have been used and suitably marked
- power supply wires have been suitably fixed (it is recommended to tight with torque of approx. 1 to 1,2 Nm).

STEP 8: Wallbox setup

From the factory, the station is set up to start charging with the power required by the vehicle to the station's maximum (22 kW, 32 A) immediately after having been connected to an electric vehicle. If you require a power limitation or advanced configuration, please follow chapter "Wallbox Setup".

STEP 9: Chassis closing and functionality checking

Close the chassis and supply voltage to the station. According to chapter "Operating instructions" verify the correct functions of the charging station.

8 WALLBOX SETUP

The basic settings of the charging station can be made using the changeover switches (DIP-switches) located on the station's control board. Comprehensive charging station setup can be done using the ModBus RTU protocol or the OlifeEnergy mobile app. The setup through the mobile app is described in the following chapter.

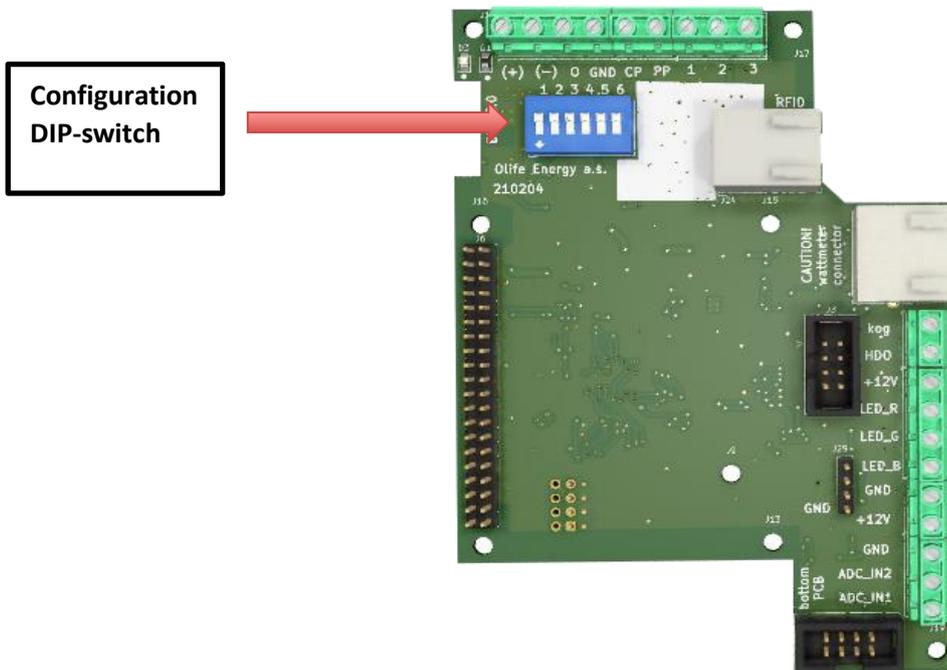


Fig. 11: DIP-switch marked on Wallbox control board

8.1 ADJUSTMENT OF MAXIMUM CHARGING CURRENT

The factory default setting for maximum charging current is 32 A. The charging current at a specific time is determined by the vehicle up to the maximum defined by the charging station. If you wish to reduce this maximum, adjust the change-over switches as shown in the table. This function is useful for installations where a lower-rate circuit breaker is mounted upstream, or where there are frequent electricity failures due to an undersized main circuit breaker.

Maximum current	Change-over switch 1	Change-over switch 2	Change-over switch 3	Change-over switch 4	Description
32 A	off	off	off	off	
20 A	ON	off	off	off	
16 A	off	ON	off	off	
10 A	ON	ON	off	off	

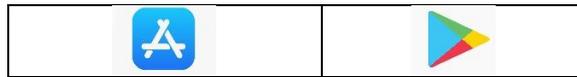
8.2 AUTOMATIC CHARGING SETUP

By default – change-over switch 3 in the ON position – the charging station will start charging immediately after the vehicle has been connected. This behaviour can be changed by setting change-over switch 3 to the OFF position. This will activate RFID authorization.

Autom. mode	Change-over switch 1	Change-over switch 2	Change-over switch 3	Change-over switch 4	Description
-	off	off	ON	off	

9 MOBILE APP

The OlifeEnergy mobile app for station control is free to download on Google Play and the App Store. The mobile app communicates with the charging station via Bluetooth. This communication works over a distance of units of meters. For remote communication, management and setup, use the SMART version and the remote OCPP server, or the OlifeEnergy Cloud service.



Connection to the Olife Energy charging station

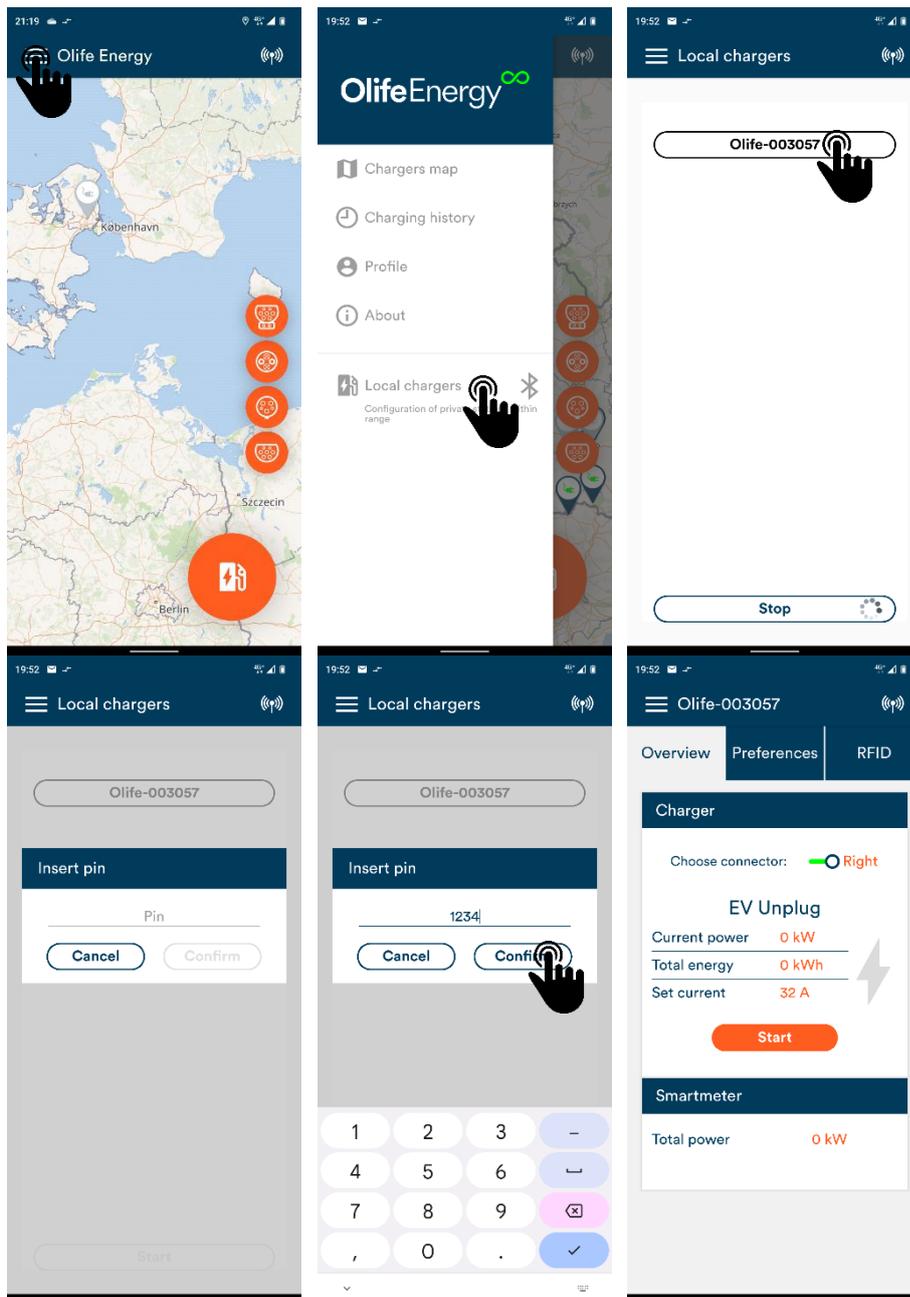


Fig. 12: Procedure to connect to the OlifeEnergy charging station

- 1) Open the left navigation bar.
- 2) Open the item "Local stations".
- 3) The app will start searching for charging stations. If a station is within range, it will appear in the list. Select the station you wish.
- 4) After selecting a station, a dialog box will appear.
- 5) Enter the PIN, which is set up by factory to **1234**. **After the first connection, change the PIN using the mobile app.**

- 6) If the authorisation is successful, the information and configuration cards of the charging station will be displayed.

The app displays 3 cards:

- 1) **Overview** – it displays the current overview of the charging station state
- 2) **Settings** – it displays the configuration registers. To see what the updated register means, click on the question mark icon. After clicking, a dialog box will appear with a description of the register.
- 3) **RFID** – it is used to manage the local RFID database.

10 RESET TO FACTORY DEFAULTS

DIPSWITCH No. 4 is used to reset the charging station to factory settings.

1. Turn off the power supply to the charging station.
2. Remove the charging station cover and switch DIPSWITCH No. 4 to the "ON" position.



3. Turn on the power supply to the charging station and wait for 30 seconds.
4. Turn off the power supply to the charging station again and return DIPSWITCH No.4 to



- the "OFF" position.
5. Finished - Install the charging station cover and turn on the power supply; the charging station is now in default setting with PIN being "1234".

11 RFID

11.1 DESCRIPTION

The reader is designed to read RFID chips operating at a frequency of 13.56 MHz. The system supports communication with ISO/IEC 14443 A/MIFARE cards and transponders without additional active circuits. The electronics is supplemented with an indicating piezo speaker.

11.2 TECHNICAL PARAMETERS

Communication interface	UART	Reading range	<50 mm
Frequency	13,56 MHz	Dimensions (mm)	64 x 40 mm
For types of chips	14443 A, MIFARE	Working current	<50 mA
Supply	2.7 – 5.5 V	Signalling interface	Buzzer

11.3 RFID READER'S CARDS AND CHIPS MANAGEMENT

User authentication by RFID cards is activated by placing change-over switch 3 to the OFF position (see Automatic charging setup), or in the mobile app. RFID card authentication is performed against an internal database located directly in the station. The RFID card and chip database is managed via the OlifeEnergy mobile app, see Chapter 9 "Mobile App".

In the SMART version, the authentication of RFID records on a remote server can be activated. Thus, the station reads the card and asks the server if it can start charging. In this case the RFID cards and chips are registered on the remote server.

Adding an RFID card to local database:

- As to "Chyba! Nenalezen zdroj odkazů." click on the "Add" button.
- A dialog box will then open with the requirement: "Attach the card to the RFID reader located on the side of the charging station".
- When the card is attached to the reader, the station will alert you with a short beep. To add more cards, repeat the procedure.
- To exit add mode, click on the "End Adding" button. When the dialog box closes, the added cards will be displayed in the RFID card.
- To save them to the charging station, click on the "Save" button.

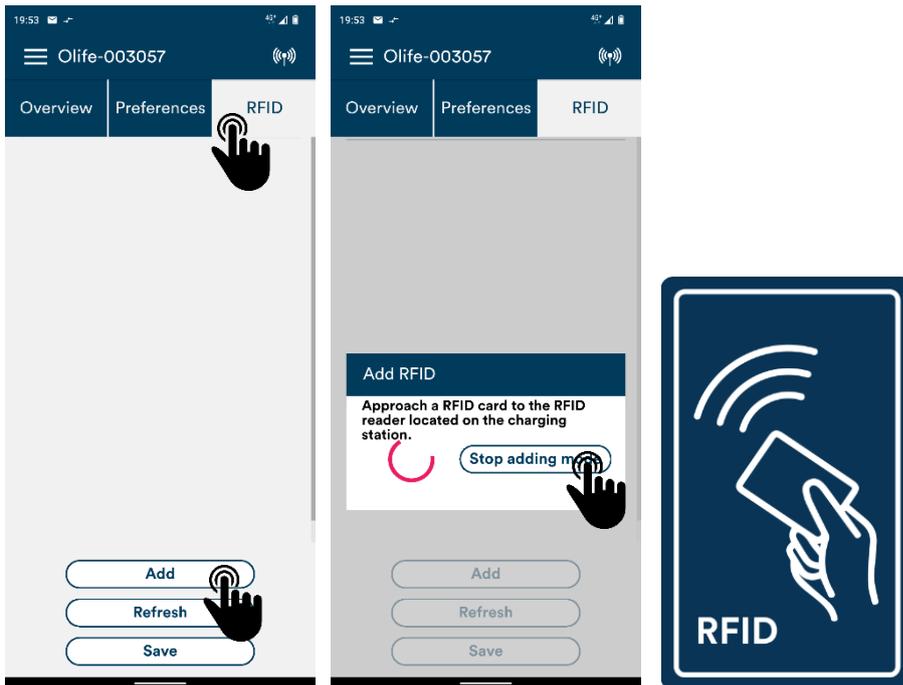


Fig. 13: R FID menu to add cards + a symbol on the station to which cards and chips are added

Deleting the RFID card:

- Click on the "Delete" button for the desired RFID card. To confirm the request, click on the "Save" button.

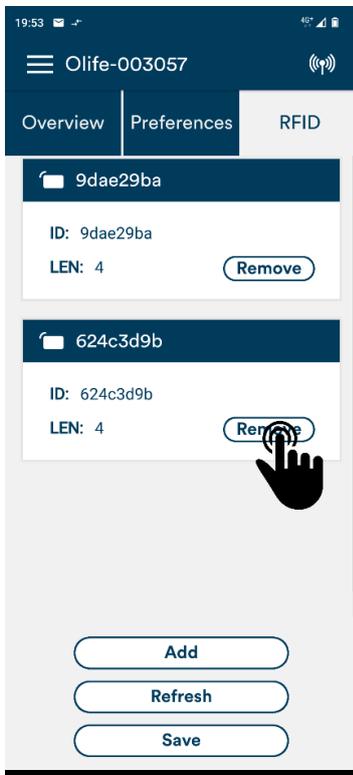


Fig. 14: Deleting RFID card

12 CHARGING STATION CONTROL VIA RS485 – MODBUS RTU

The charging station can be completely controlled through RS485 digital communication with MODBUS RTU communication protocol, where the charging station is on the “Slave” bus bar.

CAUTION! It is not possible to combine third party control systems via RS485 and OlifeEnergy Smartmeter, which uses RS485 for its communication with the station.

The Slave ID can be changed in the mobile app. The bus bar terminator is disconnected in the station, its connection can be done using a jumper, see Fig. 15.

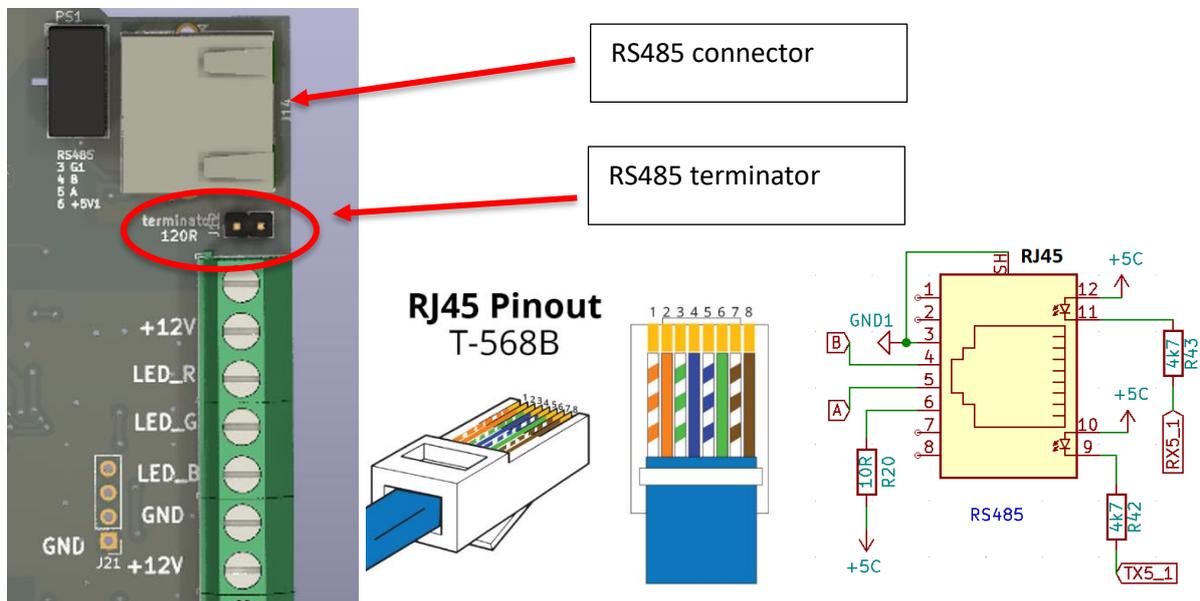


Fig. 15: RS485 wiring

Register	Parameter	Description	Operation	Type	Range
2101	Verify user	1 - enable charging, 0 - disable charging (only if register 5003 != 0)	R/W	uint16_t	0-65535
2104	EV state	Charging station state	R	uint16_t	0-65535
		1 - disconnected			
		2 - connected			
		3 - user verified			
		4 - charging			
		5 - vehicle stopped charging			
		6 - current set up below 6A			

		7 - user authentication off			
		90 - Error			
2106	current limit control	connector current setup	R/W	uint16_t	0-65535
2107	Actual Current limit	currently valid current limit	R	uint16_t	0-65535
4106	E sum	energy of running charging	R	uint32_t	0-4294967295
4113	P sum	power of running charging	R	uint16_t	0-65535
5003	Automatic	1 - user needn't be verified for charging, 0 - authentication necessary	R/W	uint16_t	0-1
5006	Max station current	maximum current collection of the entire station	R/W	uint16_t	0-63
5008	Max LED PWM	LED lighting intensity - 0 to 1000	R/W	uint16_t	0-1000

Only function 03 – Read Multiple Registers – is allowed for reading
 Function 16 – Write Multiple Registers – for writing down

The complete description of MODBUS registers is available by the producer upon requirement.

13 CONTROL OF CHARGING CURRENT THROUGH ANALOGUE SIGNAL

The charging station can be controlled by an external third-party system's 0–10V analogue signal, or the charging can be interrupted by an external third-party system's 10–20V digital signal.

CAUTION! The analogue input is galvanically connected to the PE protection conductor, the 0–10V control signal must be galvanically isolated.

The control characteristic is linear and inverse. Thus, if no voltage is connected to the analogue input, the station charges with the maximum set-up current.

0 – 1 V	Maximum charging current (according to set-up maximum of the station)
1 – 9 V	Continuous, inverse, linear regulation of charging current from the maximum up to 6A
9 V	6A (the lowest possible charging current)
9 – 9,3 V	hysteresis for switching off/on
9,3 – 10 V	Switched off

CAUTION! The IEC 61851-1:2017 charging standard allows a minimum charging current of 6 A per phase. In the range from 0 to 6 A the station will interrupt/not start charging.

According to the standard, continuous control may range between 6 and 32 A and the minimum step is 1 A; all phases may only be controlled simultaneously, so it is not possible to require a different charging current on each phase; if necessary the Wallbox can only be supplied from one or two phases. The maximum input voltage for linear current control is 10 V, but for digital START/STOP control, a voltage of 10 to 20 V can be used.

- Connection on the charging station side:
 - Connect a galvanically isolated output signal from an external device (e.g. PLC, Wattrouter, ...) to the charging station to the ADC_IN1 terminal.
 - Connect the signal ground/reference to the GND terminal.
 - If a +12 V supply is required for a galvanically isolated signal, it is possible to use supply from the charging station, from the +12 V terminal. **CAUTION!** The current collection may not exceed 50 mA.

Charging station setup:

The charging station does not have to be set up, as the control described above is factory activated.

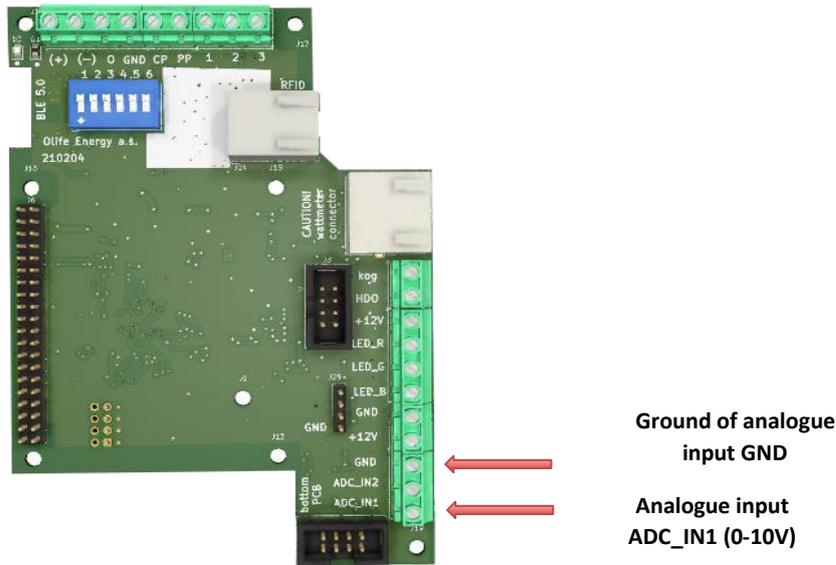


Fig. 16: Controlling conductor wiring

14 HDO CONNECTION

Place the “REL” relay with a NC contact "normally closed" and a 230 V coil in the upstream mounted switchboard. Feed the relay contact using a twisted or shielded two-wire cable into the charging station from the bottom side through the middle bushing. Connect one conductor to the +12 V terminal and the other to the ADC_IN1 terminal.

You can control the relay coil from the HDO receiver or HDO contactor by a switched phase or a switched neutral conductor. We recommend to protect the coil with a single-pole circuit breaker.

If charging is required at a time when the HDO signal is not active (high tariff), the analogue input function, thus also the function of charging only in the presence of the HDO signal, can be switched off via Bluetooth using the mobile app.

Function description

If the "REL" relay is activated (contact closed), i.e. +12 V and ADC_IN1 are connected, the charging station disables charging. As soon as the relay disconnects the contact, the charging station will enable charging.

CAUTION! The recommended HDO connection uses the 0–10 V input, therefore it cannot be used for further control afterwards.

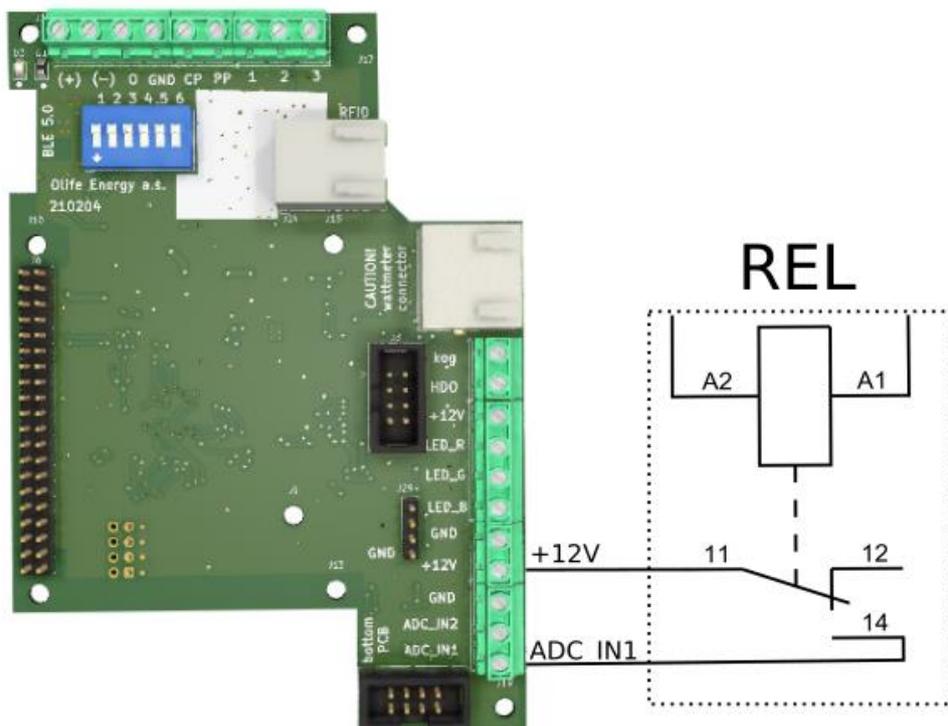


Fig. 17: An example of external control connection using a relais controlled by HDO signal

15 OPERATING INSTRUCTIONS



Before each charging check the charging station visually, including the charging cable and socket (see Chapter “Station Checking”) to be sure that the station is not visibly damaged.

The charging station is ready for charging when the green uninterrupted light is on.

15.1 CHARGING STATION WITH CHARGING CABLE

If the charging station is ready for charging, insert the charging plug of the charging station into the vehicle. Charging will begin upon successful RFID authorization; if the station is in automatic mode, charging will begin immediately. You can terminate charging by via vehicle (unlock, vehicle button or vehicle socket button, etc.) or by RFID.



15.2 CHARGING STATION WITH SOCKET

If the charging station is ready for charging, insert the charging plug into the charging station first and then into the vehicle. Charging will begin upon successful RFID authorization; if the station is in automatic mode, charging will begin immediately. You can terminate charging via vehicle (unlock, vehicle button or vehicle socket button, etc.) or by RFID.



Attention! The charging station is intended for electric cars complying with ČSN EN 61851 that all modern mass-produced electric car meet.

16 DESCRIPTION OF LED INDICATION

STATUS		REPEATING	ON [ms]	OFF [ms]	BREAK [ms]
STATION READY FOR OPERATION			∞		
EV CONNECTED		1x	100	200	3000
EV IS BEING CHARGED		∞	2000	1000	
EV STOPPED CHARGING		2x	100	200	3000
CURRENT SET TO 0A		3x	100	200	3000
CONTROLLER STOPPED CHARGING		4x	100	200	3000
ERROR OF RCD PROTECTOR		5x	100	200	3000
ERROR	STATE_E_0	6x	100	200	3000
	STATE_E_3	7x	100	200	3000
	STATE_E_L12	8x	100	200	3000
	STATE_E_MIN	9x	100	200	3000
	STATE_E_MAX	10x	100	200	3000
RFID	Accepted	10x	100	100	
	Rejected	1x	0	2000	

STATUS can be observed in smartphone application Olife Energy. The status is also indicated by repeated blinking of LEDs at the side of the charger.

EV STOPPED CHARGING: this status occurs if the charging session is stopped by electric vehicles. For example EV is unlocked, charged to 100% (or any pre-set value in EV if available) or EV error

CURRENT SET TO 0A: Charging current can be set to 0A (or less than 6A) by various reasons:

1) Through RS485 interface:

a) Olife Energy meter is connected into RS485 MODBUS interface in order to prevent local grid overload or to provide charging from photovoltaic energy only. If the Smartmeter keeps stopping charging even you think it should not, please check the settings in smartphone application, such as enabled charging from PV excess energy under insufficient sunlight conditions, HDO (ripple control) input enabled, correct values of current measured in overview tab, etc.

b) any other 3rd party RS485 Modbus RTU controller

2) Olife Energy Cloud

3) 3rd party OCPP server

4) 0-10V analog input.

a) Connected HDO (ripple control) relay 12V into 0-10V input

b) 3rd party 0-10V analog control unit or 12V digital input unit

CONTROLLER STOPPED CHARGING: If the charger Authorisation method is NOT set to AUTO through the smartphone app or dip-config, the controller stops charging based on different inputs:

1) Charging was stopped by repeated RFID authorization

- 2) Charging was stopped by STOP button in smartphone application
- 3) Charging was stopped by OlifeEnergy Cloud (for SMART/CLOUD charging stations only)
- 4) Charging was stopped by 3rd party OCPP server
- 5) Charging was stopped by RS485 input by external MODBUS RTU control unit.
CAUTION: this status can not be triggered by Olife Energy Smartmeter!

ERROR OF RCD PROTECTOR: CAUTION! This error is result of safety step triggered by current leakage sensor! It is necessary to check the cable connection of the charger, especially moisture of EV charging connector of the charger output plug / socket. It is recommended to leave that to qualified electrician. The error can be deleted by restarting the charger.

EV error: These errors can not be influenced or repaired by used. Try restarting the charger. If the error occurs please contact the Olife Energy service.

17 OCPP CONFIGURATION

The OCPP is available for CLOUD and SMART versions of Olife Energy Wallbox. The BASE version of the products does not support OCPP.

17.1 Description

The charging station shall be configured via a web interface in the station. The following modes can be set: charging (automatic/authorized), web interfaces (Ethernet, Wi-Fi, GSM modem) and connection to a remote server (Olife-Energy Cloud, OCPP).

17.2 Procedure

1. Connect a network cable (Ethernet) in the station. In the initial setting, the station expects being assigned IP address from DHCP server.
2. Open the web server on your device and connect to the station IP address (http://charger_ip).
3. Log in the web interface with username: *owner* and password: *owner*.

Now you can start adjusting the station setting. Once changed, the new setting must be saved. To see the changes, the station must be restarted.

18 EQUIPMENT INSPECTION

18.1 VISUAL INSPECTION BEFORE EACH CHARGING

A visual inspection should be carried out before each use. If a defect occurs, record the result of the inspection for later inspection by a specialist.

Recommended inspection points:

- **Visual inspection of the integrity of metal parts placed on the charging station chassis** – If the station is visibly damaged, there is a risk of leakage and failure of the internal electronics. It is prohibited to use the charging station with any visible damage. If the station

is damaged, it is imperative to shut down the station immediately by turning off the upstream located main switch or the appropriate circuit breaker.

- **Optical inspection of the condition of charging connectors and cables** – If a charging connector or cable is visibly damaged, its further use is not permitted. It is imperative to shut down the station immediately by turning off the upstream located main switch or appropriate circuit breaker for the duration of the repair.
- **Visually inspection of the charging connector pins for oxidation** – If any corrosion or oxidation is visible, the station must be shut down by turning off the upstream located main switch or the appropriate circuit breaker for the duration of the repair.
- **Optical inspection of station lighting** – If the LED indication on the station shows problems (non-functioning, partial non-functioning), the station must be shut down by turning off the upstream located main switch or the appropriate circuit breaker for the duration of the repair.



Attention! The internal electronics of the charging station is not subject to the scope of regular inspection. Any intervention by persons without the appropriate electrical qualifications is prohibited.

18.2 REGULAR SERVICE INSPECTION



Danger!

Danger of injury and damage to property through improper maintenance and repair! Only a qualified service technician may inspect or repair the charging station.

To ensure long-term reliability and safety and to maintain the guarantees, the OlifeEnergy Wallbox charging station must be subject to a regular expert inspection every six months. Make a record of the service inspection and keep it.

Recommended points of inspections

- Optical inspection of the chassis and its tightness, and bushing and cover tightness.
- Optical check of conductors for oxidation.
- Tightening of conductors in terminal boards (torque 1 – 1,2 Nm)
- Checking the station function (states) according to EN 61851 using an electric car or a special item.

19 FAILURE DETECTION AND TROUBLESHOOTING



Danger!

Danger of injury and damage to property through unprofessional maintenance and repair! Only a qualified service technician may inspect or repair the charging station.

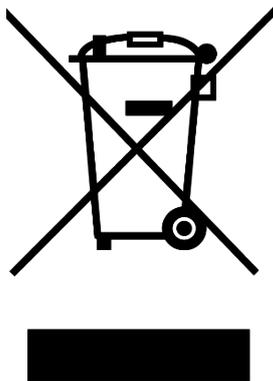
Information about faults occurring during the charging station operation, their possible causes and troubleshooting are mentioned in the table below.

All the works on the charging station (assembly, maintenance, repairs etc.) may be carried out solely by service workers.

Failure	Possible cause	Troubleshooting
The charging station does not light up	<ul style="list-style-type: none"> - Failure in the upstream located installation (circuit breaker/residual current protector) - Connectivity failure (SMART version only)) 	<p>Check whether the power supply is live. For SMART stations, check the data lead or SIM card if fitted. If the station still does not light up, disconnect the station from the power supply (using an upstream-mounted circuit breaker) for 10 seconds and reconnect.</p>
The charging station does not charge	<ul style="list-style-type: none"> - Failure in the upstream located installation (circuit breaker/residual current protector) - Cable failure - Authentication 	<p>Check whether the lead-in is live. Check if you authorize correctly (automatic mode, RFID, payments)</p>
The charging station is flashing intensively	<ul style="list-style-type: none"> - Error state of the station 	<p>Count the number of flashes, move to Chapter 16 “Description of LED indication, and record the error.</p> <p>Disconnect the station from the power supply (using an upstream located circuit breaker) for 10 seconds and reconnect. If the error is repeated, contact the service technician authorized for the charging station.</p>

20 INFORMATION FOR USERS ON THE DISPOSAL OF ELECTRICAL AND ELECTRONIC DEVICES

20.1 HOUSEHOLDS



The symbol on the product or in the accompanying documentation means that used electrical or electronic products must not be disposed of with municipal waste. In order to dispose of the product correctly, please take it to the designated collection points where it will be accepted free of charge.

By properly disposing of the charging station, you will help preserve valuable natural resources and you help prevent potential negative environmental and human health impacts that could result from unprofessional waste disposal. Contact your local authority or the nearest collection point for further details.

Fines may be imposed in accordance with national regulations if the charging station is disposed of incorrectly.

20.2 USE IN COMPANIES

For proper disposal of electrical and electronic devices please ask your dealer or supplier.

21 CONTACT TO PRODUCER

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