



INSTRUCTIONS FOR USE

# ROLLS-ROYCE CONNECTED WALLBOX

ROLLS-ROYCE  
MOTOR CARS

## Contents

|                     |    |
|---------------------|----|
| Information         | 3  |
| Overview            | 9  |
| Requirements        | 10 |
| Installation        | 13 |
| DIP switch settings | 17 |
| Connect Terminal    | 20 |
| Commissioning       | 21 |
| Operation           | 22 |
| LED information     | 27 |
| Troubleshooting     | 28 |
| Technical data      | 29 |
| Disposal            | 31 |

# 1 INFORMATION

## 1.1 SYMBOLS USED



Denotes instructions or warnings that you must observe. ◀



Denotes instructions that draw your attention to special features. ◀



Denotes the end of the instruction.

## 1.2 SAFETY INFORMATION

Read the safety information carefully and familiarise yourself with the device before you attempt to install, operate or service it.



- Electrical danger! The Rolls-Royce Connected Wallbox must be installed, commissioned and serviced by appropriate trained, qualified and authorised electricians (1) who bear full responsibility for compliance with current standards and installation regulations.
- Please note that an additional overvoltage protector may be required by vehicle or national regulations. Please refer to your national connection and installation standards.
- Before commissioning the device, check that all screw and terminal connections are tight. The terminal panel must never be left open without supervision. Fit the terminal panel cover when you leave the Rolls-Royce Connected Wallbox.
- Do not make any unauthorised changes or modifications to the Rolls-Royce Connected Wallbox.
- Repair work to the Rolls-Royce Connected Wallbox is not permitted and may only be completed by the manufacturer or a trained expert (Rolls-Royce Connected Wallbox replacement).
- Do not remove any identifiers such as safety symbols, warning instructions, rating plates, labels or cable markings.
- The Rolls-Royce Connected Wallbox does not have its own mains switch. The residual current operated circuit breaker and circuit breaker on the building installation is used as a mains isolation device.
- Pull the vehicle connector out of the inlet by the plug, not the cable.
- Ensure that the vehicle connector is not mechanically damaged (kinked, jammed or run over) and that the contact area does not come into contact with heat sources, dirt or water.
- Do not touch the contacts of the connector.
- Always conduct a visual inspection for signs of damage before charging. Pay particular attention to dirt and moisture on the plug, cuts on the vehicle connector cable or chafing on the insulation, and also ensure that the cable output from the Rolls-Royce Connected Wallbox is securely fastened. ◀

(1) People who, as a result of the training, skills and experience and knowledge of the relevant standards can assess the work and identify possible dangers.



- Never clean the Rolls-Royce Connected Wallbox using a jet of water (hosepipe, pressure washer, etc.)!
- Ensure that the Rolls-Royce Connected Wallbox is not damaged by incorrect handling (housing cover, internal parts, etc.).
- If it is raining or snowing and the Rolls-Royce Connected Wallbox is installed outdoors, do not open the terminal panel cover.
- Danger of breaking the plastic housing.
- Do not use countersunk screws to secure the device.
- Do not tighten the securing screws with force.
- The installation area must be completely flat (max. 1 mm difference between the support and securing points). Do not bend the housing.
- For maximum security, the energy meter should be installed/sealed in a secure environment to prevent any unauthorised access and all connection cables and sealing must be checked regularly. If any sealing is broken the security and safety can no longer be ensured and Rolls-Royce Motor Cars and its affiliates are not liable for damages and/or losses related to such disturbances, security breaches, unauthorised access, interface, intrusion, leakage and/or theft of data or information. ◀

Information for trained personnel who may open the device: Danger of damage. Electronic components may be destroyed if touched. Before handling modules, perform an electrical discharge process by touching a metallic grounded object. A failure to follow the safety information may result in a danger of death, injury and damage to the device. The device manufacturer cannot accept any liability for claims resulting from this.

### 1.3 ELECTROMAGNETIC COMPATIBILITY COMPLIANCE STATEMENT: FEDERAL COMMUNICATIONS COMMISSION PART 15

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

## 1.4 INTENDED USE

The Rolls-Royce Connected Wallbox is a charging station for indoor and outdoor use for charging electric or plug-in hybrid vehicles. Do not connect any other devices such as electric tools. The Rolls-Royce Connected Wallbox is designed for installation on a wall or a column. Comply with the relevant national regulations for installing and connecting the Rolls-Royce Connected Wallbox.

The intended use of the device in every case includes compliance with the ambient conditions for which this device was developed.

The Rolls-Royce Connected Wallbox was developed, manufactured, tested and documented on the basis of the relevant safety standards. If you comply with the instructions and safety information described for its intended use, the product normally will not pose any danger in terms of property damage or to the health of people.

This device must be grounded. In the event of an error, the ground connection will reduce the danger of an electric shock.

The instructions contained in this manual must be followed to the letter. Otherwise sources of danger may be created or safety equipment may be rendered inoperable. In addition to the safety information provided in this manual, the safety and accident prevention regulations relating to the specific device must be followed.

## 1.5 ABOUT THIS MANUAL

This manual and the functions described in it are valid for devices of the following type.

Rolls-Royce Connected Wallbox:

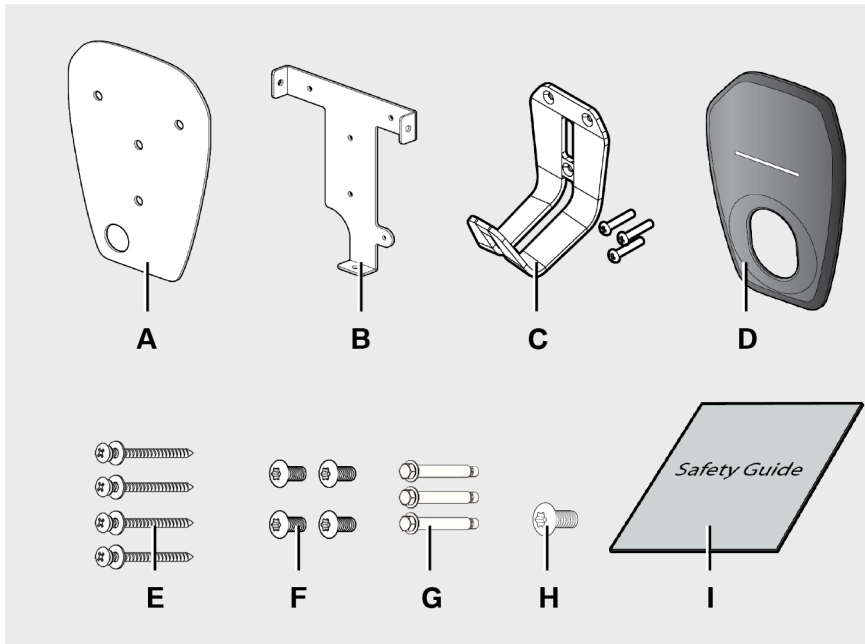
- 61 90 5A7A891
- 61 90 5A7A892
- 61 90 5A7A893
- 61 90 5A7A894
- 61 90 5A7A895
- 61 90 5A7A896

This manual is designed exclusively for trained personnel. These are people who, as a result of their training, skills and experience and their knowledge of the relevant standards, can assess the work assigned to them and identify possible dangers.

The illustrations and explanations contained in this manual refer to a typical version of the device. Your device version may differ from this.

Please refer to the operating manual for information and instructions for operating the device.

## 1.6 PACKAGE



- A Mounting template
- B Mounting bracket
- C Cable holder
- D Cosmetic cover
- E No.8 wood screws (4x)
- F F Torx T30 mounting bolts (4x)
- G 1/4" expansion bolts (3x)
- H Torx T20 anti-theft screw
- I Safety Guide

I01 0050 V

## 1.7 WARRANTY

Rolls-Royce Motor Cars Service can provide more information on the terms of the warranty. However, the following cases are not covered by the warranty.



- Defects or damage caused by installation work which was not carried out as specified in the Rolls-Royce Connected Wallbox installation instructions.
- Defects or damage caused by the product not being used as specified in the Rolls-Royce Connected Wallbox operating manual.
- Costs and damage caused by repair work not carried out by a specialist electrician authorised by a Rolls-Royce Motor Cars sales outlet or authorised service workshop. ◀

## 1.8 SAFETY REQUIREMENT

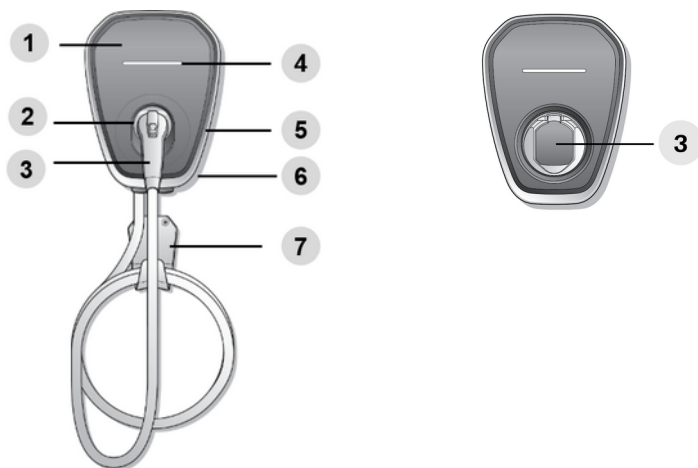
- CQC certification requirements: Rolls-Royce Motor Cars guarantees that Wallbox can only be used in Rolls-Royce Motor Cars self-sold models with S2 switch.
- SRRC certification requirements: Wallbox contains TD-LTE/LTE FDD and Bluetooth functions, and belongs to TD-LTE/LTE FDD/Bluetooth terminals.
- NAL network access license requirements: Wallbox is a TD-LTE wireless data terminal with built-in TD-LTE/LTE FDD wireless data function.



## 2 OVERVIEW

### 2.1 DISPLAY AND CONTROLS

- 61 90 5A7A891
- 61 90 5A7A892
- 61 90 5A7A893
- 61 90 5A7A894
- 61 90 5A7A895
- 61 90 5A7A896



1. Cosmetic cover
2. Vehicle connector inlet
3. Vehicle connector (L) / Socket with shutter (R)
4. LED indicator
5. Middle cover
6. Mounting bracket
7. Cable holder

## 3 REQUIREMENTS

### 3.1 GENERAL CRITERIA FOR SELECTING AN INSTALLATION SITE

The Rolls-Royce Connected Wallbox has been designed for indoor and outdoor use. It is therefore necessary to ensure the correct installation conditions and protection for the device at the installation site.

- Ensure that you comply with local regulations for electrical installations, fire safety and accident prevention as well as keeping local rescue and escape routes clear.
- Do not install the Rolls-Royce Connected Wallbox at locations:
  - Which are used as escape and rescue routes.
  - Which are inside zones where there is an explosion risk.
  - At which the Rolls-Royce Connected Wallbox is exposed to ammonia or ammonia gases.
  - At which the Rolls-Royce Connected Wallbox may be damaged by falling objects.
  - At which the Rolls-Royce Connected Wallbox is on a direct personnel route and people could stumble over the connected vehicle connector.
  - At which the Wallbox may be struck by jets of water.
  - At which the installation surface does not have sufficient strength to withstand the mechanical stresses.
- If possible, install the Rolls-Royce Connected Wallbox so that it is protected from direct rainfall so as to avoid the effects of weather, icing, damaged by hailstones or the like.
- If possible, install the Rolls-Royce Connected Wallbox so that it is protected from direct sunlight to prevent the charging current being reduced or the charging process being interrupted as a result of excessive temperatures on components of the Rolls-Royce Connected Wallbox.
- Comply with the permitted ambient conditions, see section entitled Technical data.
- Ensure compliance with national and international installation standards and regulations.

### 3.2 SPECIFICATIONS FOR THE ELECTRICAL CONNECTION

The factory current setting for the Rolls-Royce Connected Wallbox is 6A.

Ensure that you set the maximum current to suit the installed circuit breaker using the DIP switches or APP, see section entitled current settings.

## Selecting the residual-current-operated circuit breaker

The connection cable must be wired into the existing building installation and comply with the national statutory regulations.

The following considerations must be made:

- Every Rolls-Royce Connected Wallbox must be connected its own residual-current-operated circuit breaker (RCCB) externally. No other circuits may be connected to this RCCB.
- RCCB at least with type A (30 mA trip current).
- Additional measures have been taken in the EVSE to protect it from a direct current (DC) error (> 6 mA DC).

## Selecting the circuit breaker

When selecting the circuit breaker, standard values of the rated conditional residual short-circuit current is 1500A for Wallbox, also take into consideration the increased ambient temperatures in the control cabinet. In certain circumstances this may require a reduction in the charging current settings to increase the system availability.

Set the rated current to suit the model plate details in conjunction with the required charging power (DIP switch settings for the charging current) and the supply cable.

For the following model, a 40A min., 400V min., 4 poles, Type B RCCB shall be used:

- 61 90 5 A7A 891 / 61 90 5 A7A 892 / 61 90 5 A7A 893 / 61 90 5 A7A 894 / 61 90 5 A7A 895 / 61 90 5 A7A 896

## Selecting the supply cable

When selecting the supply cable, take into account the possible reduction factors and the increased ambient temperatures in the internal connection area of the Rolls-Royce Connected Wallbox, see the temperature rating of the supply terminals. In certain circumstances, this may require an increase in the cable cross-section and an adjustment in the temperature resistance of the supply cable.

## **Mains isolation device**

The Rolls-Royce Connected Wallbox does not have its own mains switch. The residual-current-operated circuit breaker and/or the circuit breaker in the supply cable are used as a mains isolation device.

## 4 INSTALLATION

The models follow the below process:

- 61 90 5A7A891
- 61 90 5A7A892
- 61 90 5A7A893
- 61 90 5A7A894
- 61 90 5A7A895
- 61 90 5A7A896

### 4.1 INSTALLATION REQUIREMENTS

- Comply with the local installation regulations.
- Acclimatisation: If there is a temperature difference of more than 15 °C between transport and the installation site, the Rolls-Royce Connected Wallbox must be acclimatised unopened for at least two hours. Opening the Rolls-Royce Connected Wallbox immediately may result in condensation formation in the interior and cause damage when the device is switched on. In certain circumstances, damage caused by condensation formation may also not appear until a later date after the installation. Ideally, the Rolls-Royce Connected Wallbox should be stored for a few hours in advance at the installation site. If this is not possible, the Rolls-Royce Connected Wallbox should not be stored in low temperatures (< 5 °C) overnight outdoors or in a vehicle.

#### **Tool list**

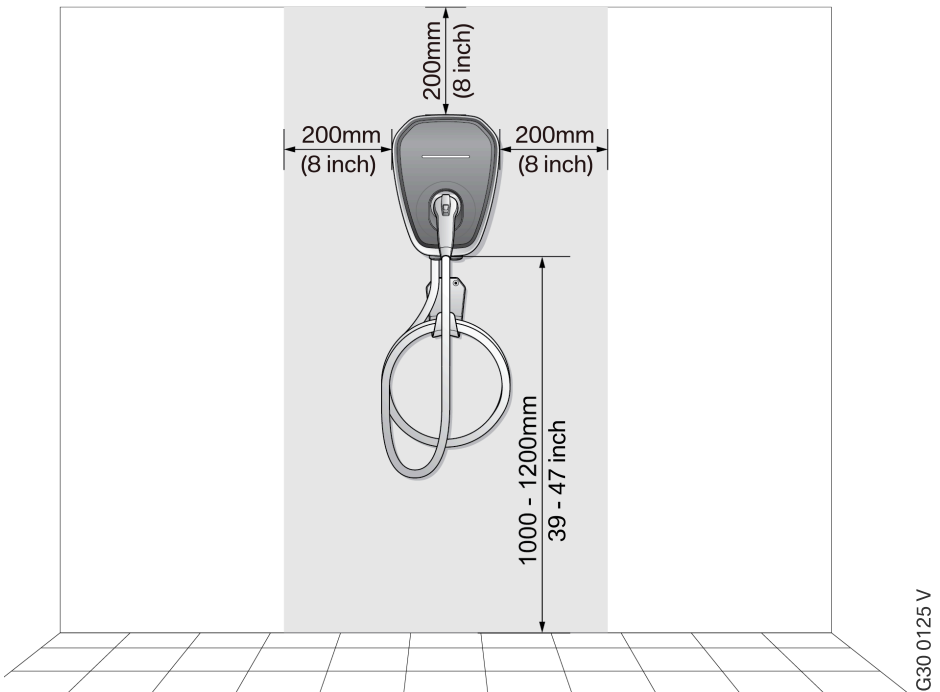
- Electro drill (only for masonry walls)
- Torx T30 screw driver
- Torx T20 screw driver
- Phillips #2 screw driver
- Terminal crimpers
- Conduit of appropriate trade size for signal wires, RS-485 (0.75mm<sup>2</sup>)-M25

## 4.2 RECOMMENDED INSTALLATION POSITIONS

When selecting the installation position, taken note of the position of the charge connector on your vehicle and the direction in which you normally park it.

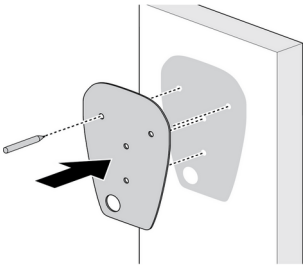
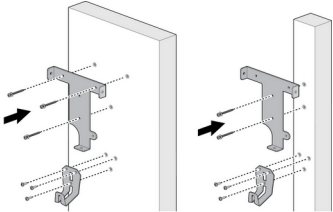
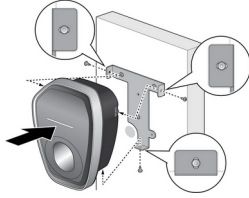
## 4.3 REQUIRED DISTANCE

Follow applicable accessibility requirements for the mounting position. The unit must be mounted at a sufficient height from ground such that the storage height is located between 1,000 mm (39 inch) and 1.2 m (4 ft).

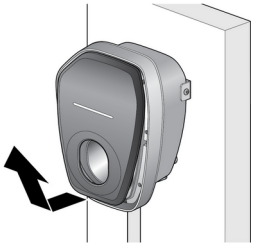
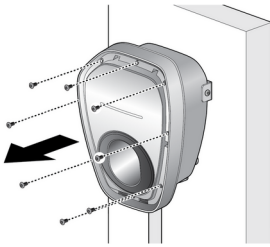


G30 0125 V

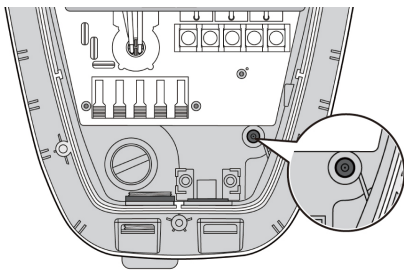
## 4.4 MOUNTING THE ROLLS-ROYCE CONNECTED WALLBOX

|   |   |
|---|---|
|   | <p>1. The product is a stationary equipment mounted on the wall. It includes a mounting template to mark the screw locations for the mounting bracket and cable holder (optional).</p>  |
|   | <p>2. Secure the mounting bracket to the wall. The cable holder is optional and depicted in the figure for demonstration purposes. The following are recommended bolt types:</p> <ul style="list-style-type: none"><li>- Masonry walls: 1/4" expansion bolts.<br/>Torque: 8.8 Nm (78 lb-in)</li><li>- Finished walls supported by wood studs: #8 wood screws of 2" or above screw length.<br/>Torque: 3 Nm (26 lb-in)</li></ul> |
|  | <p>3. Align the screw holes on the mounting bracket and the product.</p> <p>4. Install and secure the product on the mounting bracket with the supplied Torx T30 screws.</p> <p>Torque: 1.5 Nm (13 lb-in)</p>   |

#### 4.5 REMOVING THE COVERS

|   |  |
|---|--|
|  | <p>5. Remove the cosmetic cover.</p>   |
|  | <p>6. Use a T20 screw driver to remove the screws securing the middle cover.<br/>Torque: 1.4 Nm (12 lb-in)<br/>7. Remove the middle cover.</p> |

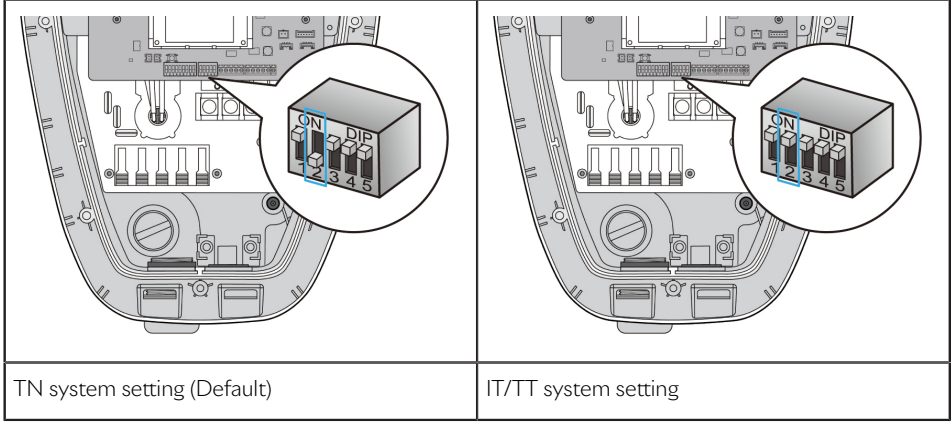
#### 4.6 SECURE THE ANTI-THEFT SCREW

|  |  |
|--|--|
|  | <p>8. Secure the anti-theft screw.</p> |
|--|--|



# 5 DIP SWITCH SETTINGS

## 5.1 GROUNDING SYSTEM SETTING

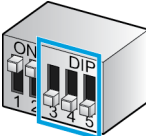
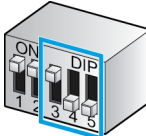
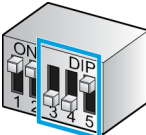
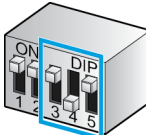
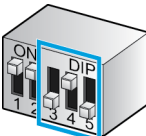
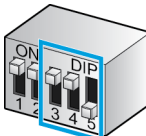
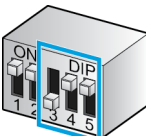
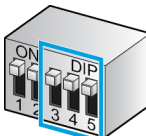


## 5.2 CURRENT SETTING

The factory current setting for the Rolls-Royce Connected Wallbox is 6 A. To achieve top charging capacity, it is recommended to set the DIP switch setting to 32 A. **This setting must only be made if the installation is safely designed and approved for this capacity.**

For the following model, the current setting is by DIP Switch:

61 90 5 A7A 891 / 61 90 5 A7A 892 / 61 90 5 A7A 893 / 61 90 5 A7A 894 / 61 90 5 A7A 895 /  
61 90 5 A7A 896

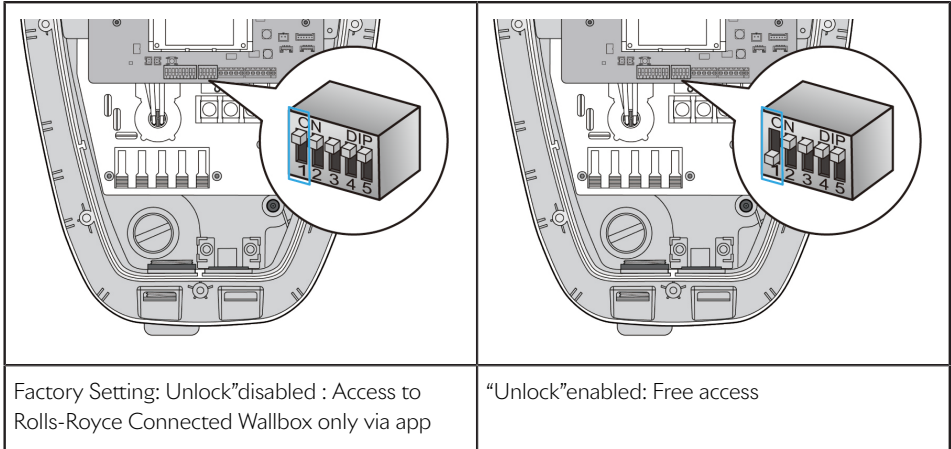
| Configuration  | Max. current rating | Configuration  | Max. current rating |
|--|---------------------|--|---------------------|
| 000<br>   | 0A                  | 100<br>   | 16A                 |
| 001<br>   | 6A                  | 101<br>   | 20A                 |
| 010<br>  | 10A                 | 110<br>  | 24A                 |
| 011<br> | 12A                 | 111<br> | 32A                 |

### 5.3 AUTHORISATION SETTING

The Rolls-Royce Connected Wallbox is set to start charging sessions with app authorisation. To “unlock” the Rolls-Royce Connected Wallbox and offer free access to users, configure the switch to OFF.

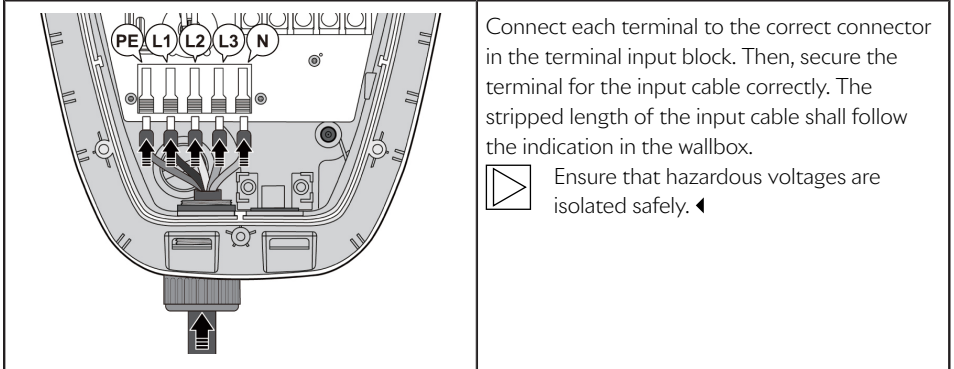
For the following model, the authorization setting is by DIP Switch:

61 90 5 A7A 891 / 61 90 5 A7A 892 / 61 90 5 A7A 893 / 61 90 5 A7A 894 / 61 90 5 A7A 895 / 61 90 5 A7A 896



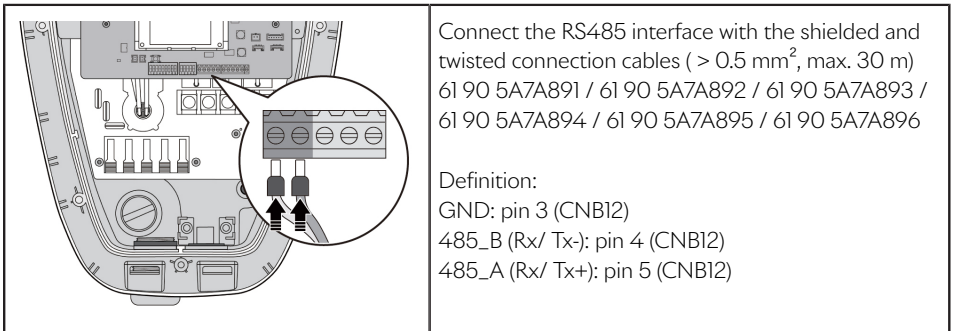
## 6 CONNECT TERMINAL

Use an appropriate copper wire with listed pressure terminal connectors, such as a ring and fork type, on the end of the conductor before attaching to the terminal blocks. Keep enough wire length to facilitate installation.

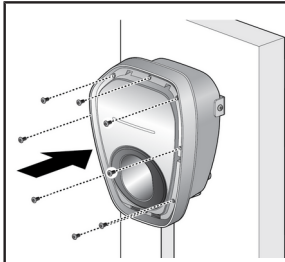


### 6.1 LOCAL LOAD MANAGEMENT

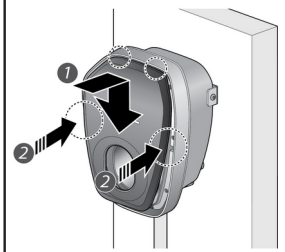
Connect the external energy meter for monitoring the domestic power connection.




## 7 COMMISSIONING



Install the middle cover.  
Torque: 1.0 Nm (8.7 lb·in)



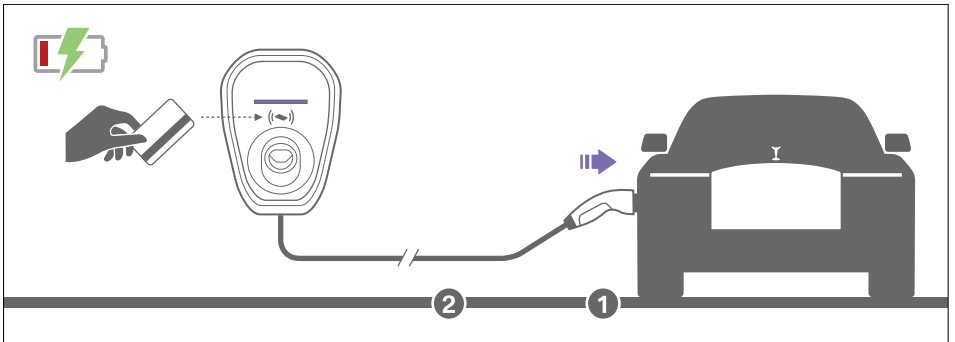
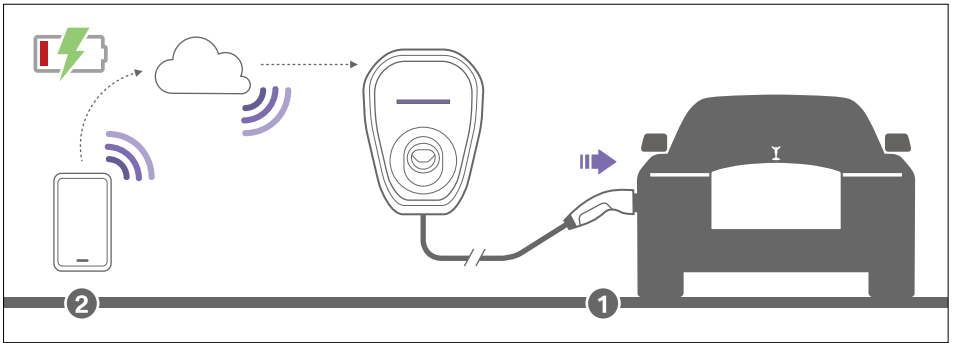
Install and lock the cosmetic plate.  
 An audible click sounds denotes a closed faceplate. ◀

## 8 OPERATION

The Rolls-Royce Connected Wallbox is supplied as standard with its access control by app enabled. Please adjust the DIP switch accordingly if you do not want to use access control via app. Please refer to section 5.3.

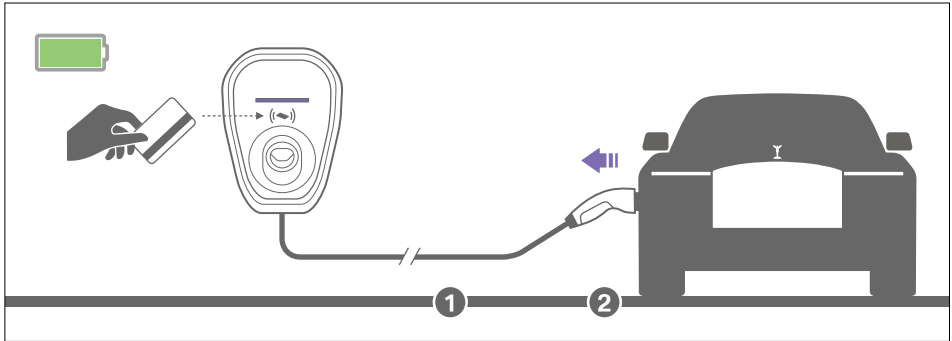
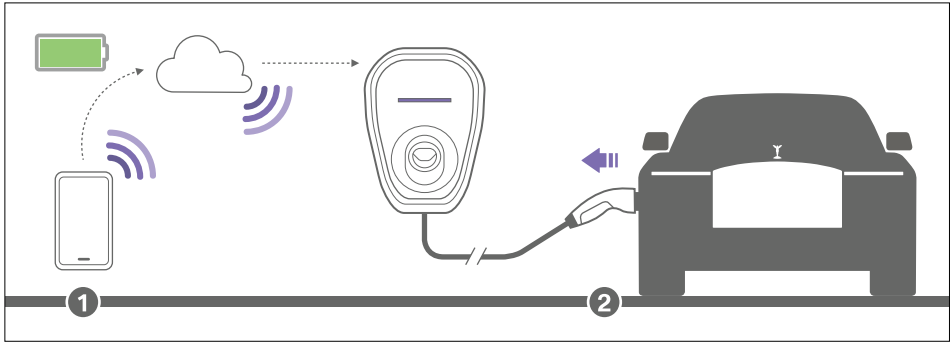
### 8.1 START CHARGING WITH ENABLED ACCESS CONTROL

1. Connect the vehicle connection plug to the vehicle charging socket.
2. Use the app or charging card to authorise and start the charging cycle.



## 8.2 STOP CHARGING WITH ENABLED ACCESS CONTROL

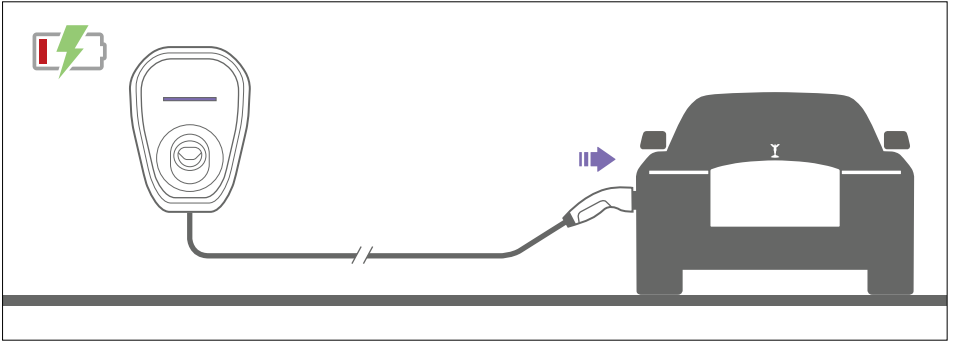
1. Stop charging cycle at the vehicle, via the app or charging card.
2. Disconnect the vehicle connection plug from the vehicle charging socket.
3. Place the vehicle connection plug back into the cable holder on the Rolls-Royce Connected Wallbox.



**Note:** Further information about ending the charging cycle is available in your vehicle owner's manual.

### 8.3 STARTING THE CHARGING CYCLE WITH ACCESS CONTROL DISABLED

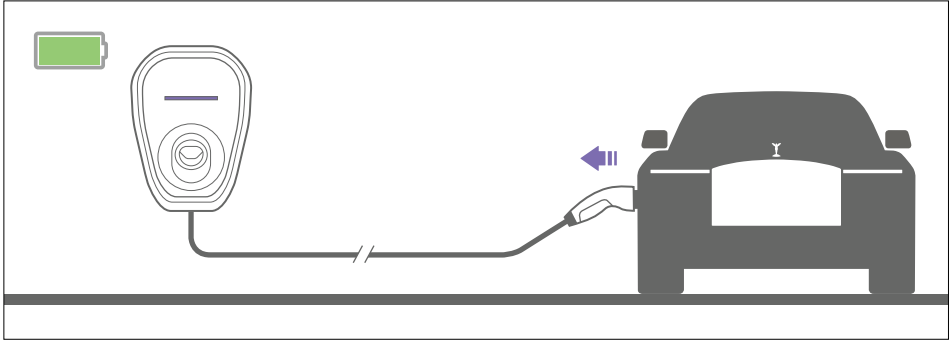
1. Connect the vehicle connection plug to the vehicle charging socket.
2. The vehicle will start the charging cycle automatically.





## 8.4 STOPPING THE CHARGING CYCLE WITH ACCESS CONTROL DISABLED

1. Stop the charging cycle on the vehicle.
2. Disconnect the vehicle connection plug from the vehicle charging socket.
3. Place the vehicle connection plug back into the cable holder on the Rolls-Royce Connected Wallbox.



**Note:** Further information about ending the charging cycle is available in your vehicle owner's manual.

## 8.5 WALLBOX INSTALLER APP

The installer or Rolls-Royce Motor Cars service partner may use the service and installation app in order to configure the device, download charging history and diagnostics, update the firmware and trouble shoot for further operating instructions, please refer to operation manual. In order to use the Wallbox Installer App, the DIP switch must be set correctly (refer to section 5.4). The app is available in all relevant app stores.

Feature:

- Charging history
- Installation guide
- Max. output current
- Firmware upgrade
- Diagnostics Data
- Language
- Reset wallbox
- Modbus parameter

The app is available in all relevant app stores.

|  |  |  |   |
|--|--|--|---|
|  |  |  |  |
| Wallbox Installer App<br>iOS   | Wallbox Installer App<br>Android   | Wallbox Installer App<br>China   | Wallbox Installer App<br>Baidu  |

## 9 LED INFORMATION

| Check colours   | Status   |
|---|--|
| No display  | Rolls-Royce Connected Wallbox does not have power supply.  |
| Blue, flashing from left to right                     | Rolls-Royce Connected Wallbox initialization in progress.<br>Rolls-Royce Connected Wallbox is suspended temporarily. |
| Blue  | Vehicle is not connected, standby.   |
| Blue, breathing                                       | Vehicle is charging.   |
| Green, flashing                                       | User login or authorization successful.  |
| Red, flashing   | User login or authorization failed.  |
| Red   | Error  |
| Blue (S1/S2/S3), Red (S4)                             | Bluetooth module is damaged or defective on standby. (The control pilot is in the state A1, A2, B1, B2 or C1)        |
| Blue (S1/S2/S3) breathing, Red (S4)                   | Bluetooth module is damaged or defective on charging. (The control pilot is in the state C2)                         |
| Blue (S1/S2/S3) flashing from left to right, Red (S4) | Bluetooth module is damaged or defective when suspended temporarily.   |

# 10 TROUBLESHOOTING

## 10.1 TROUBLESHOOTING

| <b>Situation</b>                          | <b>Action</b>   |
|---|---|
| LED indicator is not powered.             | <ol style="list-style-type: none"><li>1. No supply voltage – check the residual current breaker and power circuit breaker and switch on if necessary.</li><li>2. Error on the Rolls-Royce Connected Wallbox – contact your local dealership.</li></ol>  |
| Charging session is not started.          | <ol style="list-style-type: none"><li>1. The Vehicle connector has not been inserted correctly – remove the Vehicle connector and reconnect it.</li><li>2. The vehicle has been programmed to start the charging session at a later point of time.</li><li>3. The vehicle does not require any power – check the vehicle status.</li><li>4. App connection is not working correctly – follow the instructions in the manual.</li></ol>          |
| Vehicle connector cannot be disconnected. | The charging session has not been ended by the vehicle.   |
| LED indicator illuminated in red.         | <ol style="list-style-type: none"><li>1. Check the possible causes of the error.</li><li>2. Switch off the supply voltage to the Rolls-Royce Connected Wallbox using the appropriate mains isolation device.</li><li>3. Disconnect the vehicle connector and switch on the supply voltage again.</li><li>4. If the situation persists, contact your local dealership.</li><li>5. Detected a vehicle with the simplified Control Pilot</li></ol> |

## 11 TECHNICAL DATA

### Electrical data

|   |  |
|---|--|
| <b>Part number</b>                                      | <b>61 90 5 A7A 891 / 61 90 5 A7A 892 / 61 90 5 A7A 893 /<br/>61 90 5 A7A 894 / 61 90 5 A7A 895 / 61 90 5 A7A 896</b>     |
| Vehicle connector                                       | GB/T plug  |
| Input/output rating                                     | 380-415V~, 32A, 50/60Hz, three phases<br>100-240V~, 32A, 50/60Hz, single phase   |
| Input wiring  | PE, L1, L2, L3, N  |
| Grounding system  | TN/ IT/ TT   |
| Rated current (Adjustable rated current via dip switch) | 0A, 6A, 10A, 12A, 16A, 20A, 24, 32A  |
| Cable length  | 6m   |
| Cable feed  | Surface-mounted  |
| Minimum connection cross-section                        | 3 x 8.4 mm <sup>2</sup>  |
| Internal residual current detection                     | AC: 15~30mA<br>DC: 3~6mA   |
| Protection against electric shock                       | Class II   |
| Ingress protection(for indoor and outdoor use)          | IP65   |
| Dimensions (W x H x D)                                  | 270x370x185 mm   |
| Weight  | 6.5 kg   |
| Electrical protection                                   | Over current, short circuit, over voltage, under voltage, ground fault, over temperature protection and surge protection |

## Interfaces

|                           |  |
|---------------------------|--|
| <b>Charging connector</b> | <b>GB/T AC Plug</b>                          |
| Indicator                 | LED bar indicator (Blue, Yellow, Green, Red) |
| Communication             | Bluetooth                                    |

## Ambient conditions

|                              |  |
|------------------------------|--|
| <b>Operating temperature</b> | <b>-40 °C ~+50 °C</b>  |
| Temperature properties       | This is not a safety device, it is just an operating function. The specified operating temperature range must not be exceeded. The device supplies the charging current continuously at the specified operating temperature ranges. When over temperature protection occurred, the EVSE will stop charging. The charging will continue automatically after the EVSE cooling. |
| Storage temperature          | -40 °C to +80 °C   |
| Humidity                     | 95% related humidity, non-condensing   |
| Altitude                     | 3,000 m  |
| Cooling                      | Natural cooling  |
| Impact protection            | IK09   |
| Overvoltage category         | OVC III  |
| Cold load pick-up            | Randomized delay between 1 and 120 seconds before charging restart after power outage  |



The available charging capacity is depending on the vehicle, the infrastructure and general Wallbox settings.

In the case of 100V input, if the input voltage drops below 80% instantaneously due to unstable input voltage, the system may be shut down and restarted. ◀

## 12 DISPOSAL



After correctly decommissioning the device, please have it disposed of by the service department in compliance with current waste disposal regulations. The electrical and electronic devices including accessories must be disposed of separately from general household waste. There are instructions on the product, in the instructions for use or on the packaging. The materials can be recycled as shown by their labelling. You can make a significant contribution to protecting our environment by reusing, recycling the material or other forms of recycling of end-of-life devices.



**RACCOLTA CARTA**

Verifica le disposizioni  
del tuo Comune.