

Installation and Operating Manual

Wallbox electrify eBox

for Electric and Hybrid Vehicles

Type: wr30-R Public / wr30-L Public
(Right-Angled / Left-Angled Version)

Version: 05.2024





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Abbreviations Used

TEC	Type Examination Certificate
eCC App	electrify Charge Control App
eCCP	electrify Charge Control Protocol
eLMS	electrify Charging Management System
ePP	electrify Partner Portal
OCPP	Open Charge Point Protocol

1 General Information

1.1 Introduction

Thank you for choosing the electrify eBox charging station by hesotec electrify. With hesotec electrify, e-mobility is no longer a thing of the future – it is a reality.

By investing in the electrify eBox, you are choosing cutting-edge technology, combined with sophisticated design and robust compactness. Thanks to its modular and scalable construction, it enables not only stylish home charging but also provides customized all-in-one solutions for businesses.

The charging unit complies with all current safety regulations and standards.

Please read this installation and operating manual carefully before starting installation and commissioning. Keep this manual in a safe place for future reference.

1.2 Supplementary Technical Information and Additional Documents

To support you during installation and operation, this manual includes references to additional information and documents, which are available on our website or as downloadable PDF files. To view PDF files on a smartphone, tablet, or computer, you will need the free Adobe Acrobat Reader or a compatible application.

For personalized configuration and system management, you will need the electrify Charge Control App (eCC App). Further information and the quick guide for the app can be found here:



Quick Guide (PDF file)

<https://electrify.hesotec.de/download-files/ecc-app/hesotec-electrify-ecc-app-quick-guide-en.pdf>



Product page eCC App

<https://electrify.hesotec.de/en/products/ecc-app>

Optionally, you can register with the cloud-based electrify Charging Management System (eLMS) to manage additional evaluations and configuration settings. Information and a direct link to the eLMS can be found here:



electrify Charging Management System

<https://elms.hesotec.de/en>



Product page eLMS

<https://electrify.hesotec.de/en/products/elms>

The device ID is included in the delivery and contains all essential information about your charging unit.

DE Gerätepass
DK Enheds pas
EN Device ID
ES Identificación del dispositivo
FI Laitetunnus
FR ID de l'appareil
IT ID dispositivo
NL Apparaat-ID
NO Enhets-ID
PL Identyfikator urządzenia
PT Identificação do dispositivo
RU Идентификатор устройства
SE Enhets-ID

DE
 Bewahren Sie dieses Dokument gut auf. Die aufgeführten Informationen enthalten unter anderem Benutzernamen und Passwort Ihres electrify Ladepunktes. Sie dienen der eindeutigen Identifikation zum Aufbau einer gesicherten Kommunikation mit den von Ihnen autorisierten Geräten und Applikationen. Bei Verlust dieser Daten wenden Sie sich bitte an die hesotec electrify gmbh.

DK
 Opbevar dette dokument på et sikkert sted. De anførte oplysninger inkluderer brugernavnet og adgangskoden til dit elektrificerende ladepunkt. De bruges til klar identifikation til at etablere sikker kommunikation med de enheder og applikationer, der er godkendt af dig. Hvis disse data mistes, skal du kontakte hesotec electrify gmbh.

EN
 Keep this document in a safe place. The listed information includes the user name and password of your electrify charging point. They are used for unique identification to establish secure communication with your authorised devices and applications. If you lose this data, please contact hesotec electrify gmbh.

eSat r10 / Base / 11kw / 1.4301
 Serial 1234567890123

Charging point

Access data

Login ecc App

Hotspot • SSID: SSID_ESAT_XXXX
 • Password: 1234567890123

General • User: USER
 • Password: 0000

Registration key eLMS
 • Schlüssel: 15000001

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 Rubbertskath 34
 46539 Dinslaken, Germany

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 electrify@hesotec.de

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Example of a Device ID

1.3 Intended Use

The eBox wr30 Public is specifically designed for commercial applications and public charging infrastructure. It can be operated as a stand-alone unit or as part of a group installation. The Public DE variant additionally meets all requirements of German calibration law (Eichrecht).

1.4 Information in This Document

This installation and user manual describes the installation, configuration, and commissioning of the charging unit. We recommend that the electrical installation, configuration, and commissioning be carried out by a qualified electrical company. Further personalised charging point and application settings can subsequently be performed by the charging point operator/owner or the installer.

Target audience identification in this document:



Qualified Electricians / Technical Personnel



Charging Point Operators / Owners



End Users / Drivers

2 Important Information and Safety Instructions

2.1 Safety Instructions for Transport



Improper transport may cause packages to fall or tip over, potentially resulting in serious personal injury or property damage. For this reason, please observe all cargo safety regulations during transport. Always transport the goods in their original packaging only.

2.2 General Safety Instructions



To ensure proper installation and safe operation, safety instructions outlined in this manual must be followed. Improper handling or failure to observe these safety instructions may result in damage to the device, serious injury, fire, or even death.

Installation, commissioning, and maintenance of the electrify eBox must only be carried out by a qualified electrical company. The charging unit may only be operated after a technically sound installation and subsequent inspection and approval. Malfunctions and repairs that could lead to injury, damage to the unit itself, or to other connected devices must only be performed by qualified professionals.

In the event of malfunctions or issues suspected to be due to installation errors, please first contact the company that performed the installation. If the issue cannot be resolved, contact the hesotec electrify service hotline:

Phone +49(0) 2064 / 60 105 – 60

Mail electrify@hesotec.de

hesotec electrify accepts no liability for personal injury or property damage resulting from the following:

- Failure to observe the installation and user manual
- Installation by unqualified personnel
- Structural modifications to the charging station
- Unauthorised changes to the charging controller configuration
- Improper handling
- Use of unauthorized spare parts or accessories

2.3 Safety Instructions in This Manual



This manual contains essential instructions for the installation and commissioning of the electrify eBox charging station by hesotec electrify. The following safety instructions must be read carefully and strictly followed.

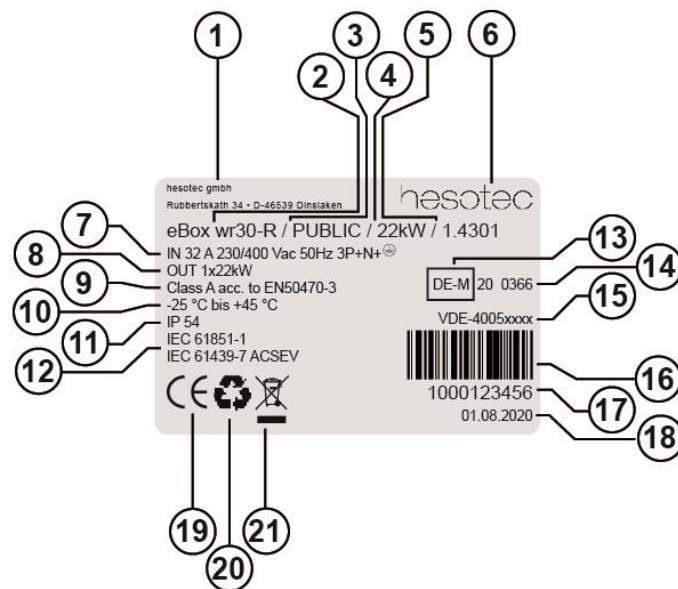
All warning notices included in this installation and user manual must be observed with particular care. The meaning of each safety symbol used in this manual is explained below:

Symbol	Description
	DANGER ! Safety notice regarding a hazard due to electrical voltage Failure to observe these instructions may result in damage to the device, serious injury, or death caused by electric shock.
	CAUTION ! Safety notice indicating a potential hazard Failure to follow these instructions may result in damage to the device or other connected equipment. Proceed with particular care and attention.
	NOTE ! Important information and special considerations For successful operation, the instructions should be followed as required.

3 Product Overview and Dimensions

This chapter provides an overview of product information along with the necessary dimensions to support optimal planning and preparation.

3.1 Nameplate



1	Manufacturer Information	8	Output Data	15	Type Examination Certificate Number (BMP No.)
2	Series and Model	9	Accuracy Class	16	Barcode (Serial No.)
3	Equipment Type	10	Operating Temperature	17	Serial Number
4	Maximum Charging Power	11	Protection Class	18	Manufacturing Date
5	Material	12	Standards	19	CE Marking
6	Manufacturer Logo	13	Metrology Marking	20	Recycling Information
7	Input Data	14	Notified Body for Conformity Assessment	21	Disposal Instructions



NOTE !

Important information and special considerations

Charging points compliant with German calibration law are marked with **"DE"** at the end of the article number. On the nameplate, the **BMP number (VDE-4005xxxx)** is only listed for **calibration law-compliant** charging points.

3.2 Scope of Delivery

eBox wr30 Public charging station (depending on design)	1x
Wall-mount adapter incl. installation manual	1x
Fastening kit (screws)	1x
Special bit for retaining screws	1x
RFID cards	2x
Service RFID card	1x
Quick installation and user guide	1x
Device ID	1x



NOTE !

Important information and special considerations

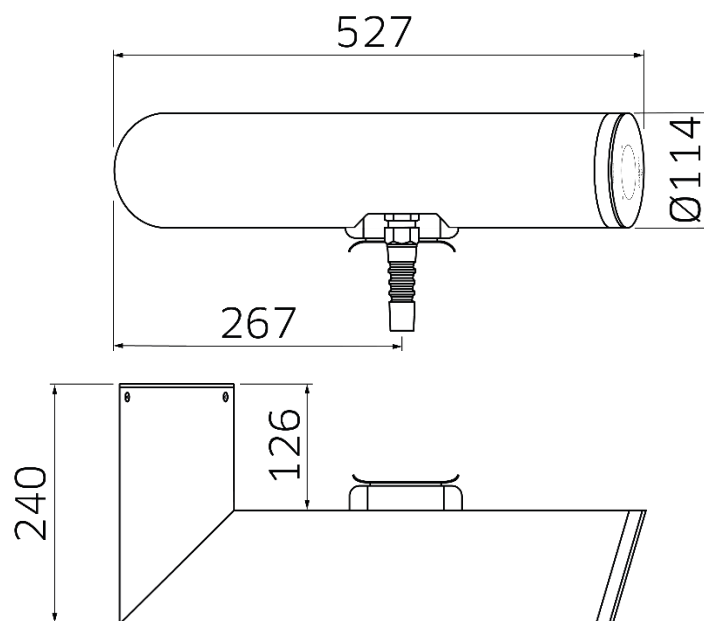
Please keep the device ID in a safe place. It contains important information, including the username and password of your electrify charging point. These credentials are required for secure communication with devices and applications authorised by you. In case of loss, please contact hesotec electrify GmbH.

3.3 Charging Unit eBox wr30

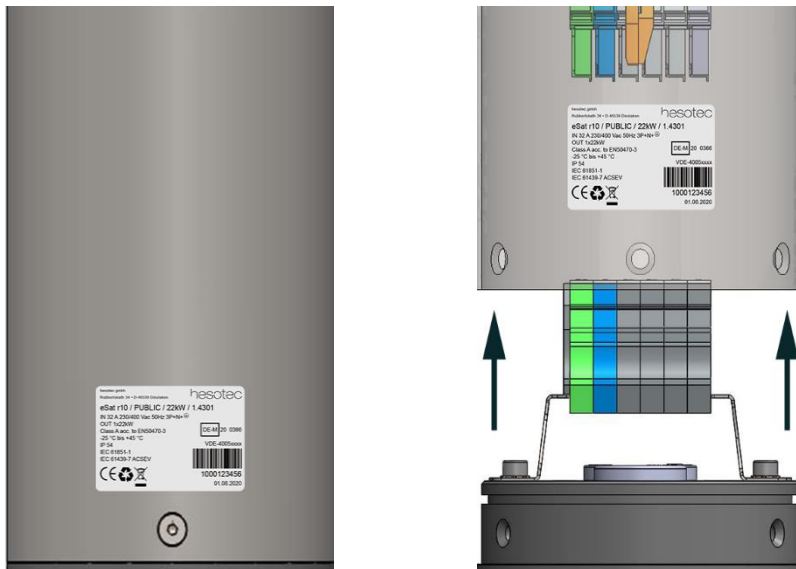
The electrify eBox you have purchased is delivered fully assembled and has passed all quality checks. Only a protected supply cable between your household distribution board and the charging unit is required. For a reliable network connection, we also recommend installing a dedicated network cable. The eBox wr30 can be mounted directly to the wall if the cable is run in-wall. For surface-mounted cabling, installation is carried out using the wall-mount adapter, which is available separately as an optional accessory.



electrify eBox wr30-R3D Model



electrify eBox wr30-R: Dimensions (unit: mm)

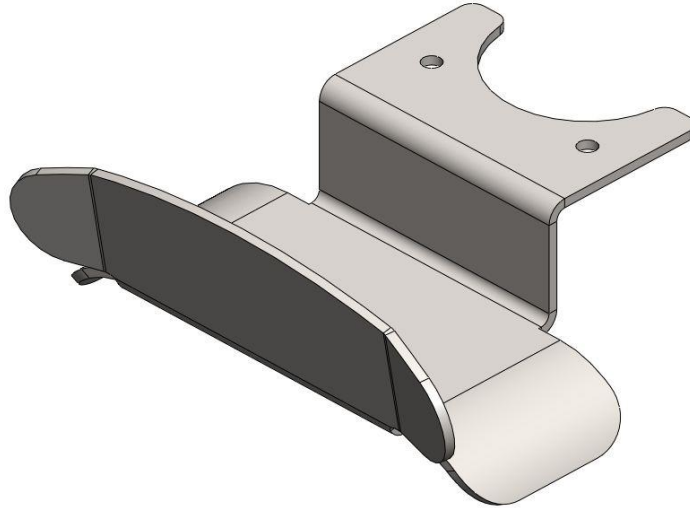


Nameplate Position:
One nameplate on the exterior (viewed from below) and one duplicate inside the enclosure (viewed from above).

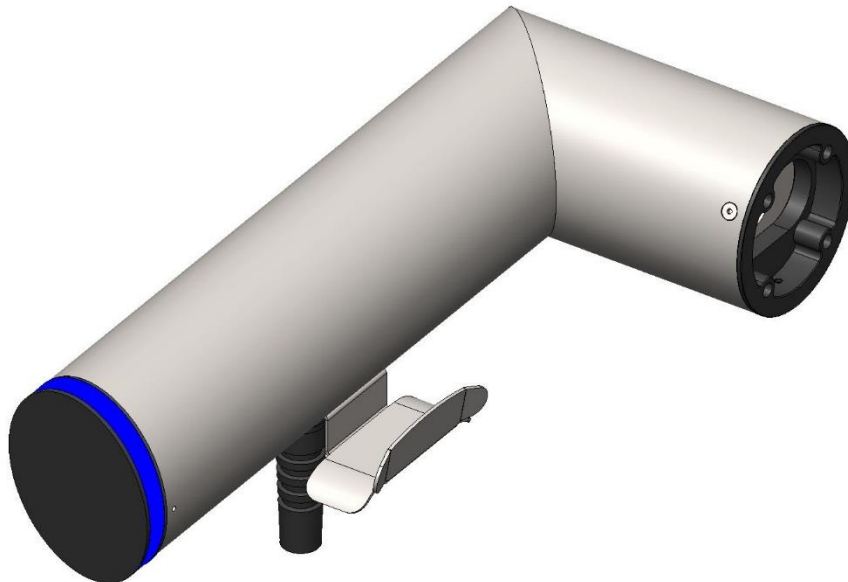
3.4 eBox WR30 Cable Holder (Spare Part) – Art. No. 00010065

The cable holder—already factory-installed—is used to hang the charging cable. It is mounted on the underside of the eBox WR30, so that it can be positioned on either the interior or exterior face.

Note: Please observe the installation instructions in section 3.2.1.



Cable holder for mounting on the eBox WR30



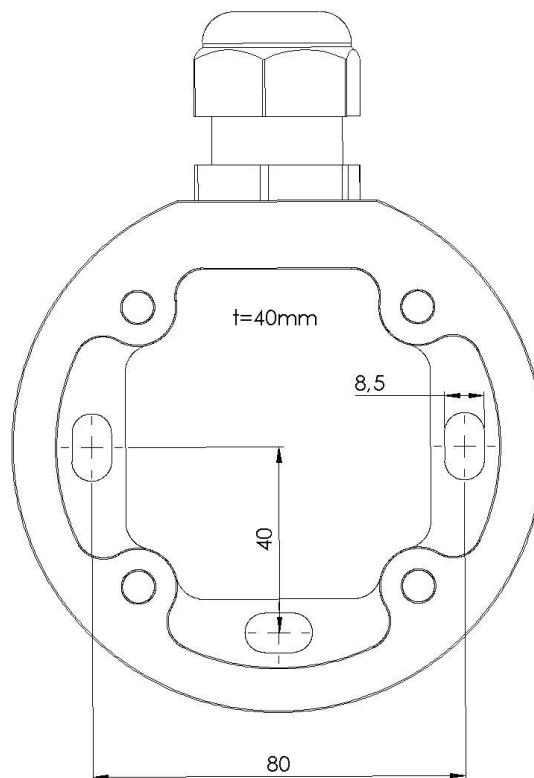
Mounting Example of the Cable Holder (Interior)

3.5 eBox Wall-Mount Adapter (Accessory) – Art. No. 00010063

For surface-mounted cables, hesotec electrify offers a wall-mount adapter as an accessory for the electrify eBox WR30 (included in the delivery). This adapter is designed to be rotated in 90° increments, allowing flexible routing of surface-mounted cables.



eBox wall-mount adapter for surface-mounted cables



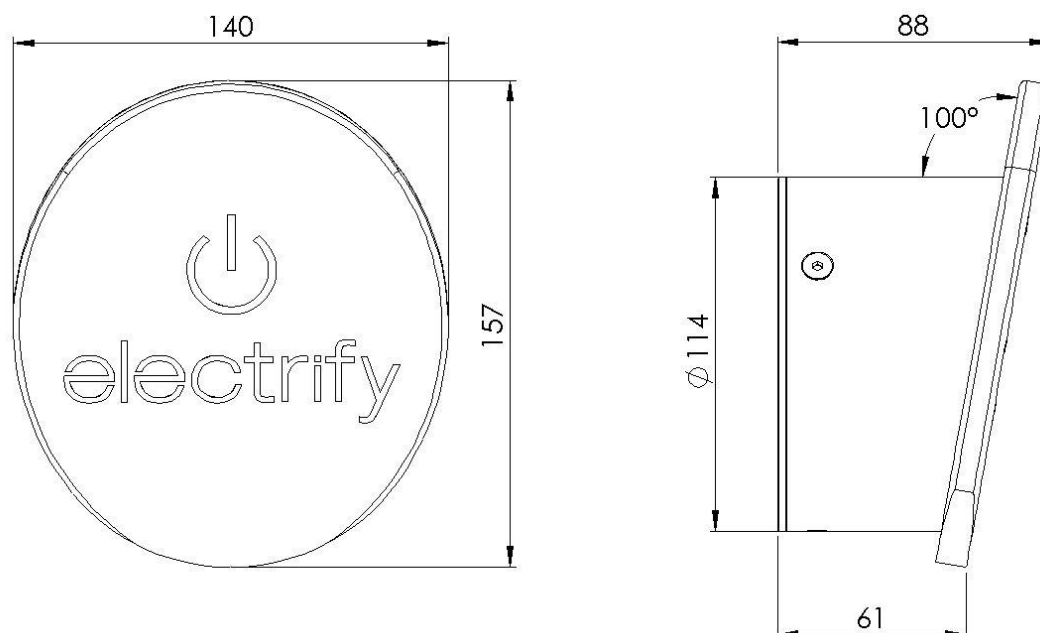
Drilling Hole Dimensions (unit: mm)

3.6 eBox Cable Wall Holder (Accessory) – Art. No. 00010064

To secure the charging cable, hesotec electrify offers a wall-mount bracket as an accessory. This can be optionally ordered in a design that matches the charging unit.



eBox cable wall holder for charging cable



Cable Wall Holder – Dimensions (unit: mm)

3.7 Technical Specifications

eBox wr30 Public 11kW / 22kW

Vehicle Connection (Output)	
1× Type 2 charging plug with fixed cable	20 A* / 32 A; cable length approx. 4 m, 5 m, or 7 m
Output voltage	400 V, 3-phase
Maximum charging current	16 A* / 32 A
Maximum charging power	11 kW * / 22 kW
Disconnection	All-pole
Components	
DC residual current detection	electronic, I _{Δn} d.c. ≥ 6mA
Contactor	4-pole with contact monitoring
Protection class	IP54
Energy meter	MID-compliant (calibrated)
Color display	2,1 Inch; 480x480 px
Communication	
Interface	WLAN, LAN
Communication	eCCP, OCPP 1.6J, Modbus TCP
Authorisation	eCC APP, RFID
Management	eCC APP, Charging management system (eLMS)
Power Supply Requirements	
Power connection	5 x 4 mm ² * / 5 x 6 mm ²
Nominal voltage	400 V AC, 3 phase +N, -20% +15%
Nominal current	16 A* / 32 A
Protection	20 A* / 32 A, 3-pole, characteristic B
AC residual current detection	RCD , Typ A, 30mA
Dimensions	
Width	527 mm
Diameter	114 mm
Depth	240 mm (280 mm with wall adapter)

*) Technical specifications for a maximum charging power of 11 kW

4 Installation

4.1 Requirements for the Installation Site of the Charging Station

**DANGER !****Safety notice regarding electrical hazards**

Ensure proper installation. Failure to comply with the requirements may result in a risk of electrical hazard.

The electrify eBox wallbox is designed for both outdoor and indoor use. For the installation of the charging unit, regulations regarding the installation site must be ensured. Only then can safe operation be guaranteed.

The following requirements must be met:

- No installation in flood-prone areas.
- No installation in areas at risk of explosion.
- Sufficient distance from other technical equipment.
- Choose the installation location so that the charging station is easily accessible from the parked vehicle (the charging cable must not be under voltage during charging operation!).
- No direct exposure to spray water.
- Ambient temperature between -25 °C and 45 °C.
- Relative humidity between 5% and 90%.
- For the installation of low-voltage systems, requirements according to IEC 60364-1 and IEC 60364-5-52 must be followed.
- To withstand mechanical stress, the mounting surface must be designed to have sufficient strength.
- Ensure an adequately dimensioned power supply cable. Note that the cable dimensioning should not exceed the cable duct clearance of the base (information on the power connection: See technical specifications).

**NOTICE !****Important information and special considerations**

Avoid installing in a cluttered area to prevent unnecessary damage to the charging station.

When placing the charging station, ensure that it is not in an area where it could be driven around by the vehicle to be charged. If necessary, install a bumper guard. Also, avoid placing it near driveways or entrances/exits. Position the eBox in a way that does not restrict access for emergency vehicles.

4.2 Installation of the electrify eBox wr30



	DANGER ! Safety notice regarding electrical hazards Ensure that the power supply line is de-energised at the time of foundation construction. Failure to follow this safety instruction may result in a life-threatening electrical hazard.
	Notice ! Important information and special considerations For secure and stable installation of the charging station, the "foundation frame" accessory from hesotec electrify is recommended.

The electrify eBox wr30 can be installed both indoors and outdoors and must be carried out by qualified personnel. The relevant dimensions can be found in the corresponding subsections.

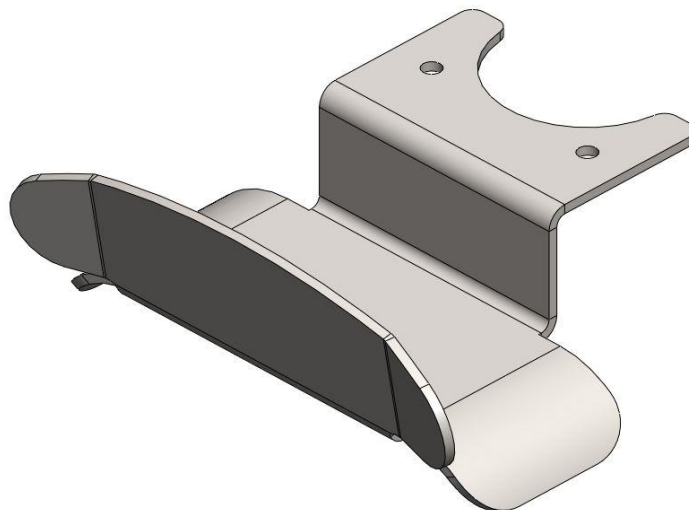
Important: Ensure that all cables are de-energised at the time of installation!

4.2.1 Installation Note for the "Standard" Cable Holder

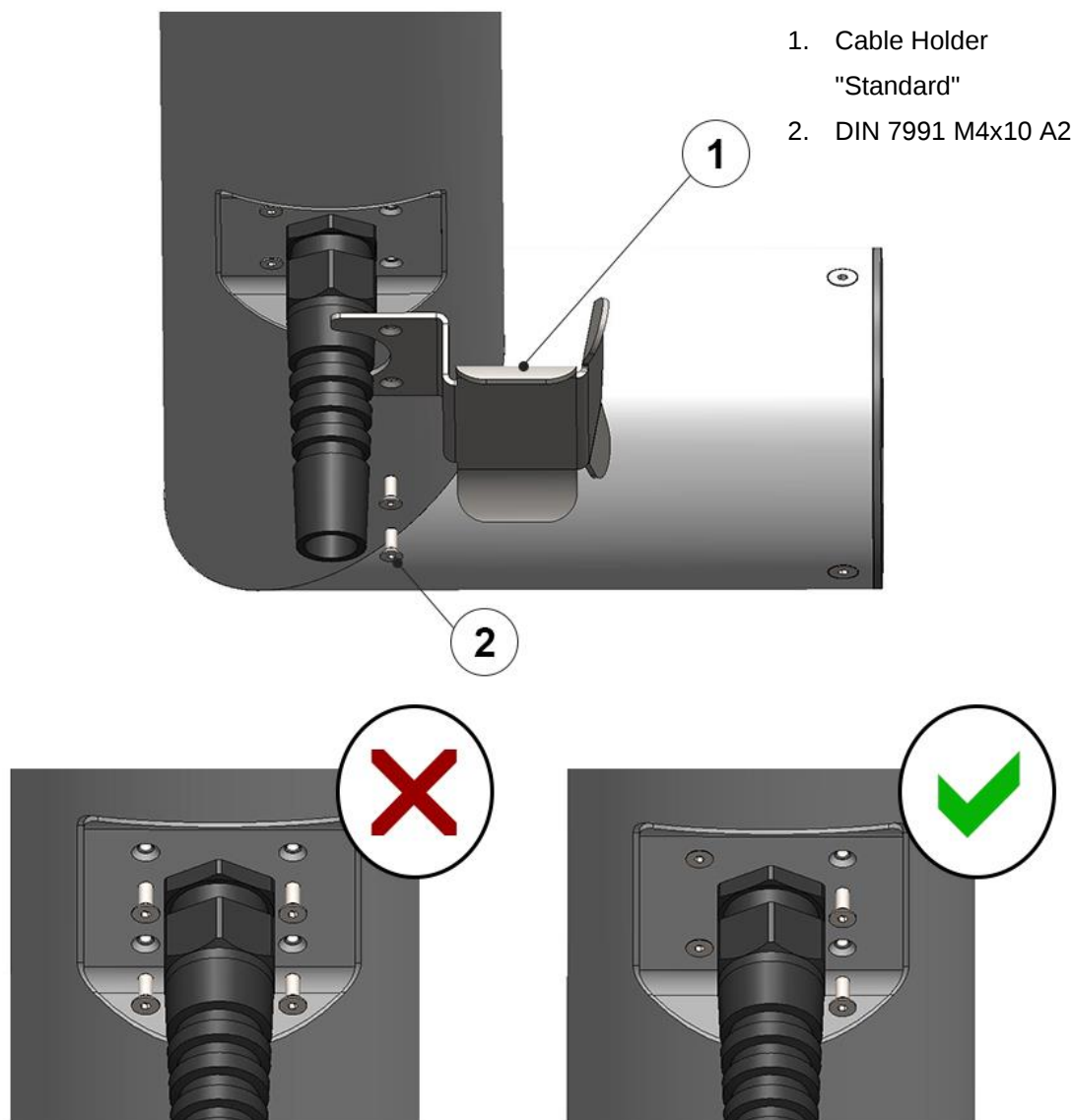


(Included in delivery)

The "Standard" cable holder is pre-installed on the charging unit. It can be mounted on the underside of the eBox wr30, oriented either to the front or rear, depending on your preference.



Cable Holder „Standard“



Mounting example of the cable holder (inside)



NOTE!

Important information and special instructions:

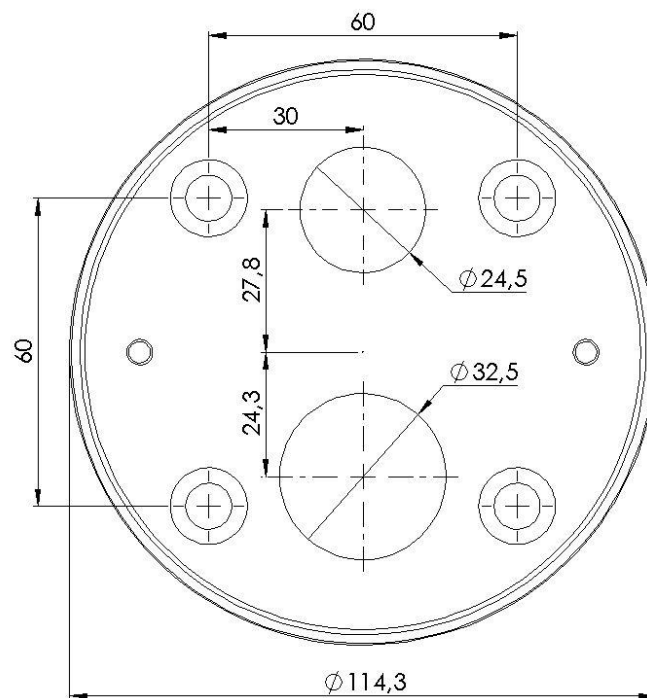
When changing the position of the cable holder to the front or rear side of the eBox wr30, *never* remove all four countersunk screws at the same time. Always ensure that at least two screws remain fastened.

4.2.2 Wall mounting



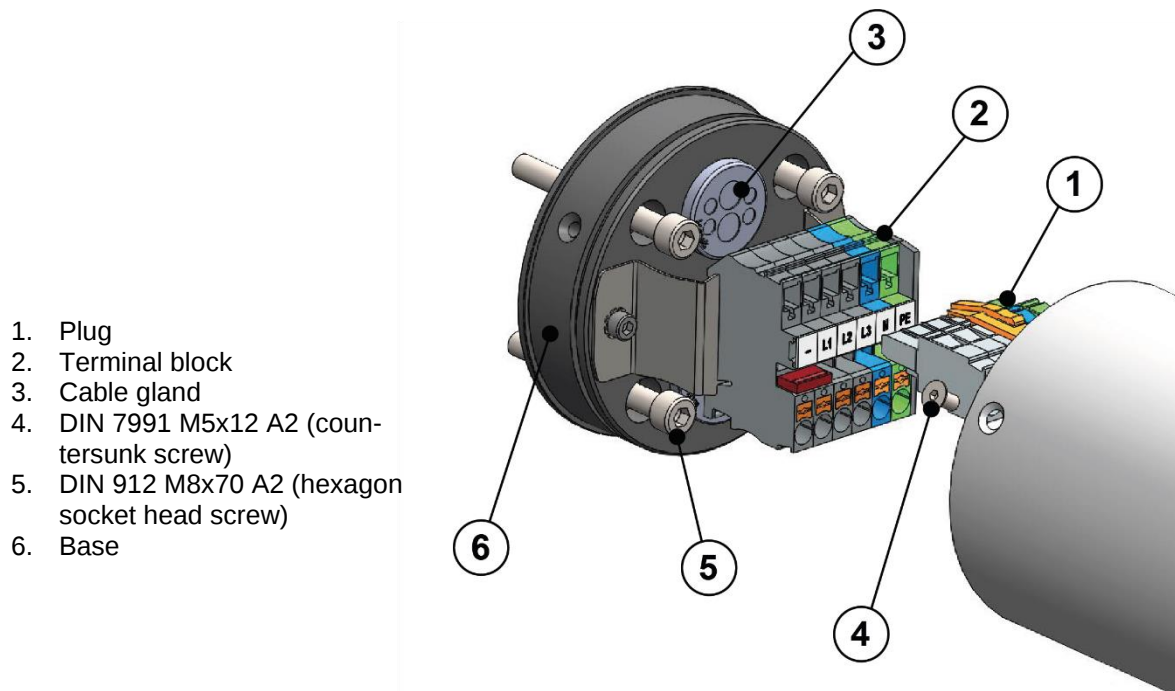
The dimensions for mounting the eBox to the wall are shown in the drawing below. Ensure that the charging unit is positioned in a way that allows the supply lines to be routed through the designated openings. Use the supplied mounting materials for installation.

(Note: The wall must have sufficient load-bearing capacity!)



Mounting Point Dimensions (unit: mm)

The electrify eBox is pre-assembled at the factory. To mount the charging unit on the wall, proceed as follows:



Mounting the charging unit

1. First, loosen the three side screws (item 4) at the lower end of the charging unit.
2. Carefully pull the base (item 6) out of the charging unit.
3. Position the base against the wall and align it properly.
4. Mark the drill holes according to the diagram.
5. Drill the previously marked mounting holes ($\varnothing$ 10 mm). Use the supplied mounting kit for installation. Make sure the wall plugs are flush with the wall and do not protrude.
6. Route the supply cable through the cable entry (item 3) of the base and fasten the base using the screws provided (item 5).
7. Before attaching the charging unit to the base, please read section "4.3.1 Electrical Installation of the eBox wr30."
8. After successful electrical installation, place the charging unit onto the base and fasten it using the three side screws (item 4).

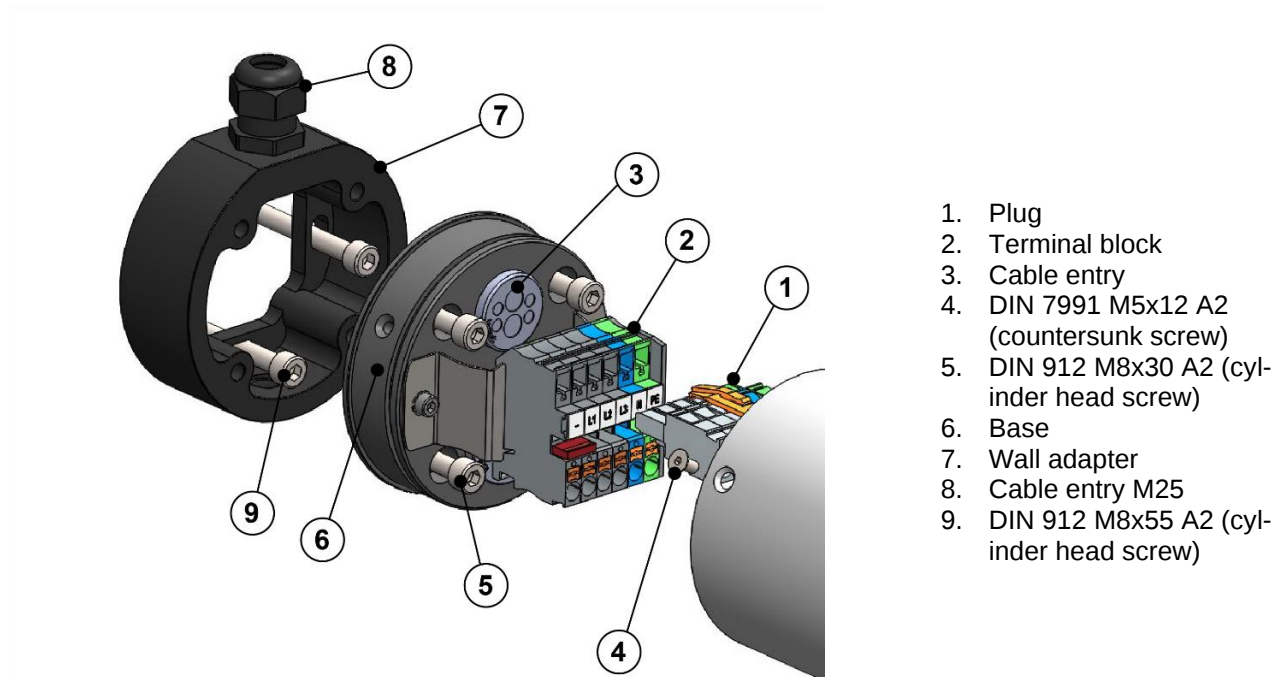
4.2.3 Mounting with Accessory "Wall Adapter"

**NOTE!****Important Information and Special Features**

For secure and stable mounting of the charging unit when using surface-mounted cables, the "Wall Adapter" accessory from hesotec electrify is recommended.

For surface-mounted cable installations, we recommend using the "Wall Adapter" accessory. This item is not included in the standard delivery and must be ordered separately.

Please follow the steps below to install the Wall Adapter:



Mounting the Charging Unit with Wall Adapter

1. Position the wall adapter (item 7) at the desired location and mark the drill hole positions.
2. Drill the previously marked mounting holes ($\varnothing$ 10 mm) and use the supplied mounting kit for installation.
3. Mount the wall adapter (item 7) to the wall and guide the power supply cable through the cable gland (item 8). Use the included screws (item 9) for fastening.
4. The installation of the charging unit can then be carried out as described in Chapter 4.2.2.

4.3 Electrical Installation



	DANGER ! Safety notice regarding a hazard due to electrical voltage Failure to observe these instructions may result in damage to the device, serious injury, or death caused by electric shock.
	CAUTION ! Safety notice indicating a potential hazard Failure to follow these instructions may result in damage to the device or other connected equipment. Proceed with particular care and attention.
	NOTE ! Important information and special considerations For successful operation, the instructions should be followed as required.

The electrical installation of the charging station may only be carried out by qualified personnel. Ensure that the cables are free from damage or pinching during installation. Such damage may impair functionality during operation, lead to malfunctions, or even cause a fire.

The following table shows the wiring diagram for the connection point between the supply line (bottom side) and the internal wiring of the charging unit, including a description of each function.

Power Supply (Wall)		Terminal Block	Charging Unit	
Colour	Function	Label	Colour	Function
-	-	LR	Black	Phase for power supply / charger controller
Brown	Phase 1	L1	Brown	Phase 1
Black	Phase 2	L2	Black	Phase 2
Grey	Phase 3	L3	Grey	Phase 3
Blue	Neutral conductor	N	Blue	Neutral conductor
Green/Yellow	Protective earth conductor	PE	Green/Yellow	Protective earth conductor

Wiring Diagram – Terminal Block electrify eBox wr30

	NOTE! Important information and special instructions Please refer to the technical data sheet in Chapter 3.7 for the power supply requirements.
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4.3.1 Electrical Installation of the eBox wr30

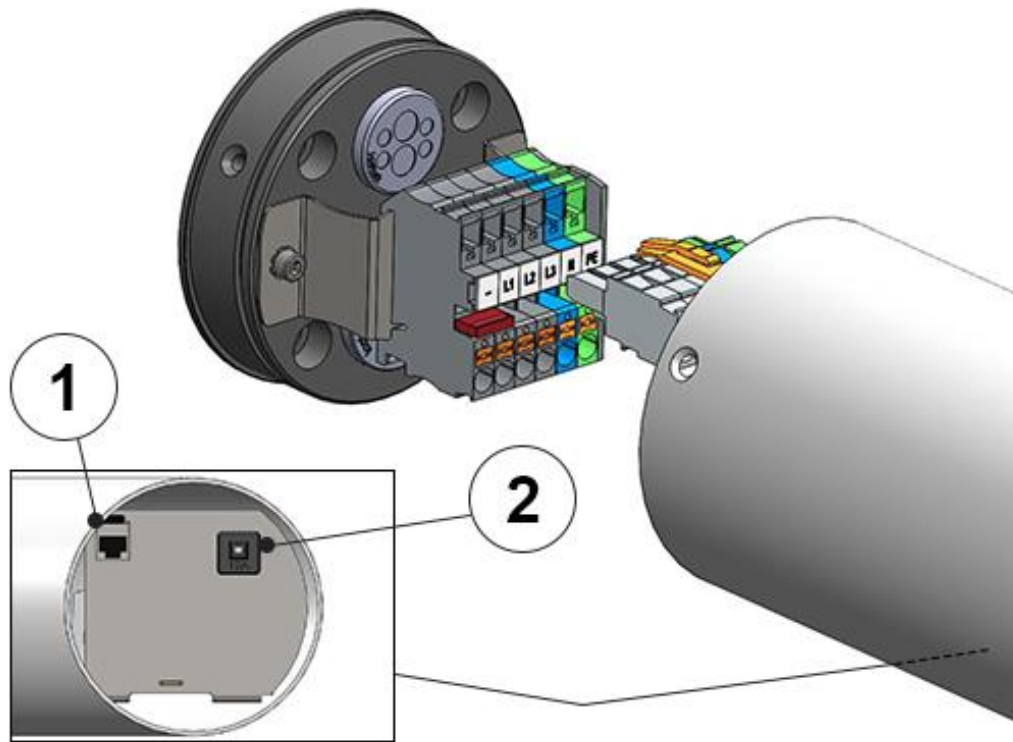


The electrify eBox wr30 is pre-assembled and pre-wired at the factory. Only the supply line needs to be connected to the connection base.

To carry out the electrical installation of the charging unit, proceed as follows:

1. Connect the 5-core supply cable coming from the wall to the terminal block according to the terminal labeling. (L1, L2, L3, N, PE)
2. Plug the connector coming from the charging unit into the terminal block.

Note: The LAN port (Pos. 1) and the resettable circuit breaker (Pos. 2) are located inside the charging station.



Wiring of the electrify eBox wr30 Charging Unit



NOTE!

Important information and special features

The LR line in the 22 kW version is equipped with a fuse (Glass cartridge fuse 5x20 mm, 10 A).

4.4 Advanced Configuration



Your electrify charging station is delivered pre-configured from the factory. Using the electrify Charge Control App (eCC) for Android/iOS or the cloud-based electrify Load Management System (eLMS), you can make additional settings and access evaluation options.

If the charging point is pre-configured for an OCPP backend, only the settings, analysis, and billing options provided by that backend will be available.

All hesotec electrify charging solutions can be integrated with various backend providers via OCPP 1.6J. In order to make the necessary configurations, some preparations must first be made.

**NOTE!****Important information and special instructions**

Access possible only with a technician credentials!

4.4.1 Partner Portal



We **recommend** registering in our electrify Partner Portal. After successful verification as an installer or distributor, you will gain access to a wide range of materials, such as installation manuals, sales documents, and much more.

<https://electrify.hesotec.de/partner>

4.4.2 electrify Charging Management System (eLMS)



A technician access is mandatory for integration into an external backend via OCPP. Please register in our electrify Load Management System at:

<https://elms.hesotec.de>

After successful registration, please contact us to activate your technician access.

Note: Technician access is granted only to qualified personnel/installers!

**Notice !****Important information and special considerations**

For instructions on activating technician access in the eCC app and integrating the charging station into an external backend, please refer to the manual: **Ocpp 1.6J Integration Hesotec Charging Solutions.**

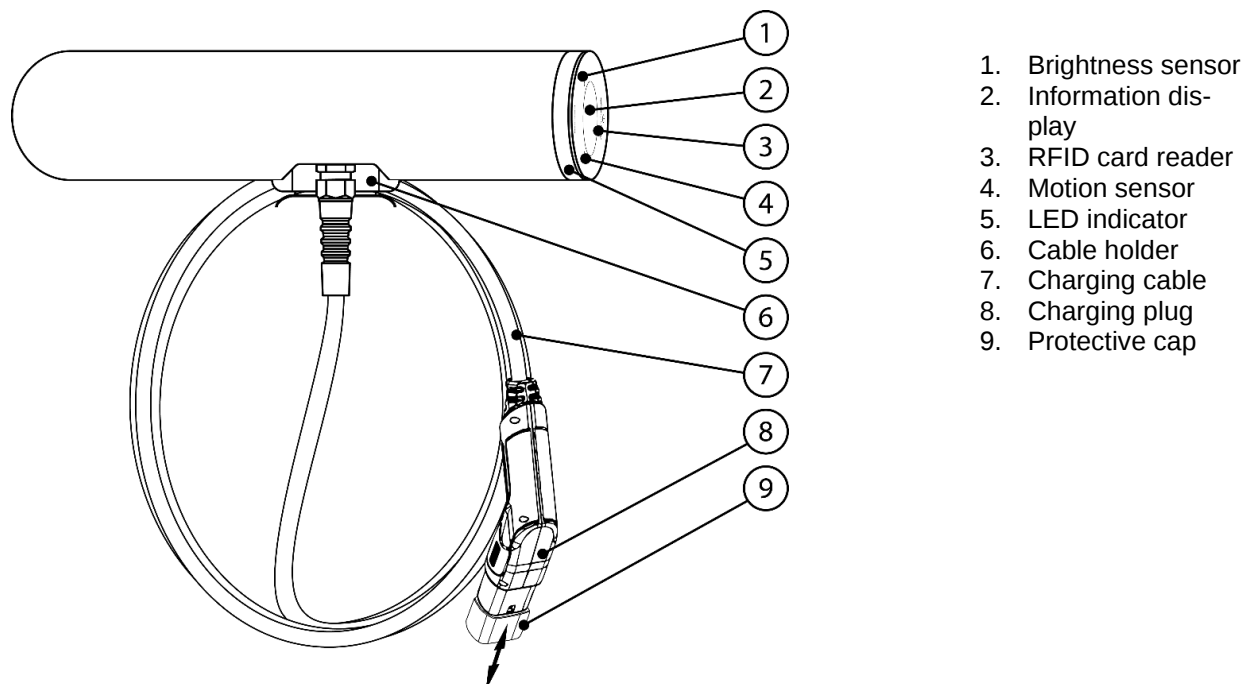
5 Operation



Local safety regulations applicable in the country where the product is used must be observed when operating electronic devices.

5.1 Controls

The following graphic shows the main control elements of the electrify eBox wr30 charging unit:



Control Elements of the electrify eBox WR30

5.2 Info – Display

The info display shows current status information. It only displays data and cannot be altered by the user. The display updates every second. No further user interaction is possible.

5.2.1 Display – Ready for Operation

If no charging process is active, the following information is displayed:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Advertising/Information banner; configurable via the manufacturer's server
- EVSE ID: Identification number of the charging station

5.2.2 Display – Authorisation Successful (No EV Connected)

If authorisation in Mode A was successful, the following information is displayed:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Text field:
Authorisation successful
Please connect your vehicle to the charging station
- Icon
- EVSE ID: Identification number of the charging station

5.2.3 Display – Waiting for Authorisation (EV Connected)

During the wait for authorisation, the following information is displayed:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Text field:
Vehicle successfully connected
Please authorise yourself
- Icon
- EVSE ID: Identification number of the charging station

5.2.4 Display – Authorisation Successful

If the authorisation was successful, the following information is displayed:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Text field:
Authorisation successful
Charging process starting
- Icon
- EVSE ID: Identification number of the charging station

5.2.5 Display – Authorisation Failed

If the authorisation fails, the following information will be displayed:

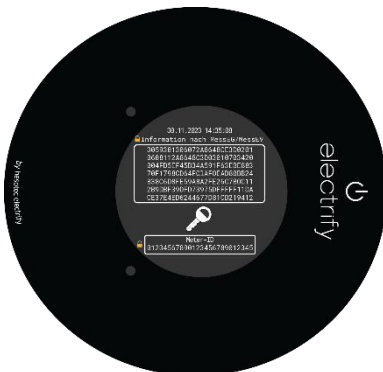


- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Text field:
Authorisation declined
Please try again
- Icon
- EVSE-ID: Identification number of the charging station

5.2.6 Display – Charging

5.2.6.1 Public Key

During the charging process, the following information is displayed for **6 seconds**:



- Date in format DD.MM.YYYY
- Time in format hh:mm:ss
- Text field:
Public key
- Icon
- EVSE ID: Identification number of the charging station

5.2.6.2 Charging Data

During the charging process, the following information is displayed for **6 seconds**:



- Date in format DD.MM.YYYY
- Time in format hh:mm:ss
- Status text:
„Charging active“, „Charging paused“
- Charge ID of the current charging session
- Start date in format DD.MM.YYYY and time in format hh:mm:ss
- Meter reading at start in kWh with 3 decimal places
- Energy charged in kWh with 3 decimal places
- Duration in hh:mm:ss format
- EVSE-ID: Identification number of the charging station

5.2.7 Display – Charging Completed

When the charging session has ended, the following information is displayed for **30 seconds**:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Status text:
“Charging completed”
- Charging ID of the completed session
- Start date in the format DD.MM.YYYY and start time in the format hh:mm:ss
- Meter reading at start in kWh with 3 decimal places
- Energy charged in kWh with 3 decimal places
- Duration in hh:mm:ss format
- EVSE-ID: Identification number of the charging station

5.2.8 Display – Tariff Information

If ad-hoc charging is active, this display alternates between showing the information during charging and in standby mode:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Text field:
Tariff information
Ad hoc charging
Free text from manufacturer/operator (tariff information)
- Icon
- EVSE-ID: Identification number of the charging station

5.2.9 Display – Update

If the charging station is in Mode A during the update process, the following information will be displayed:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Text field:
Update is being installed!
Please wait.
- Icon
- EVSE-ID: Identification number of the charging station

5.2.10 Display – Locking Failed

If the vehicle locking fails, the following information will be displayed:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Text field:
Locking failed
Please check the cable connection
- Icon
- EVSE-ID: Identification number of the charging station

5.2.11 Display – Error

If an error occurs, the following information will be displayed:



- Date in the format DD.MM.YYYY
- Time in the format hh:mm:ss
- Text field:
Charging station out of service
Please contact the operator
- Icon
- EVSE-ID: Identification number of the charging station

When holding the service RFID card to display the legally compliant calibration logbook, this view opens for 30 seconds. A maximum of the last 7 entries are shown. Each time the RFID card is scanned again, up to 7 older entries are displayed. If the oldest entries are already shown, the last display remains unchanged. If a log entry is too long and spans multiple lines, fewer logs will be shown on one page accordingly. If a read log has an invalid CRC, it will be highlighted in red, and “LOG INVALID” will be shown next to the time.

5.3 LED – Indicator

The electrify eBox signals the current operating status using the LED indicator. With the electrify Charge Control App, the technician can choose from 8 different colours.



Green



Blue



White



Red



Yellow



Orange

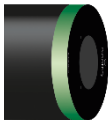
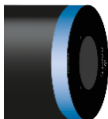
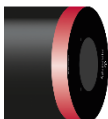


Pink



Violet

The electrify eBox is factory-preconfigured with a colour scheme to indicate its operating status. The factory-set colour combinations, along with their corresponding operating statuses, are shown in the table below:

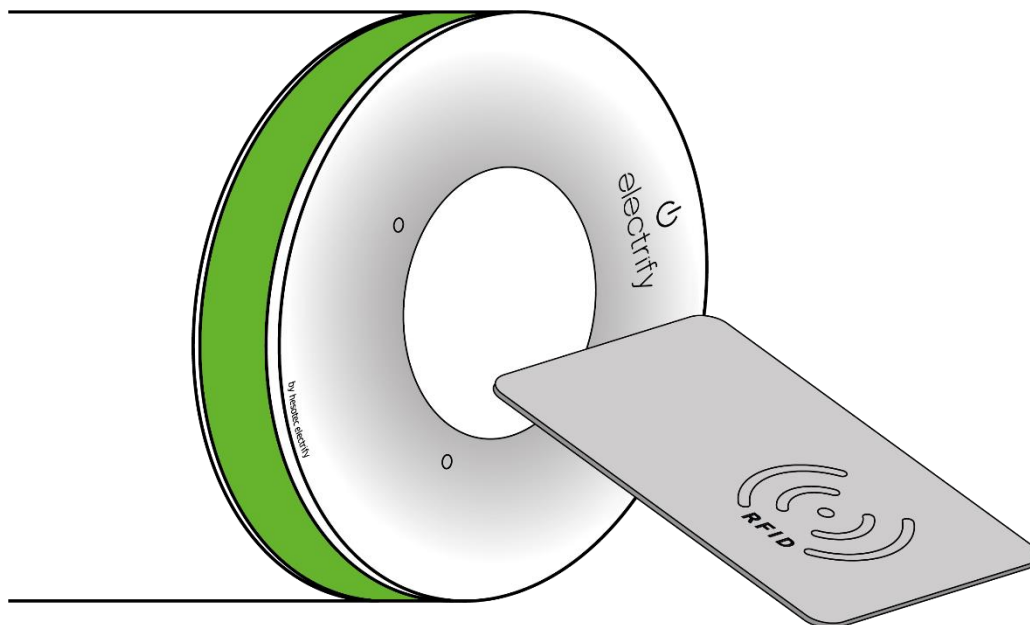
Graphic	Operating Status
 grün	State A: The charging station is ready for operation.
 Blau	State B: Electric vehicle is connected. State C: Charging process is active (pulsating).
 Weiß	Waiting for authorisation via app or RFID card.
 Rot	State E: There is a fault at the charging station.

**NOTE !****Important information and special features:**

The colour scheme configuration is done via the electrify Charge Control App. Here, not only the colour but also the dynamics can be adjusted (steady light or pulsating). For more information, please refer to the Quick Guide of the electrify App.

5.4 RFID – Card Reader

RFID cards can be read at the lower part of the charging station head. The user holds the RFID card in front of the symbolically marked reading area. After successful authorisation (see 5.5.1), the charging process is enabled. No further user interaction is required.

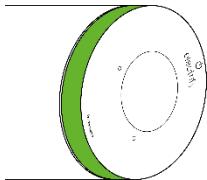
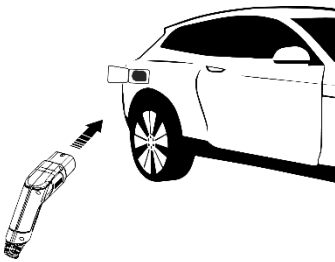
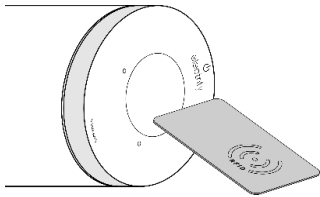
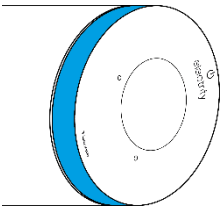
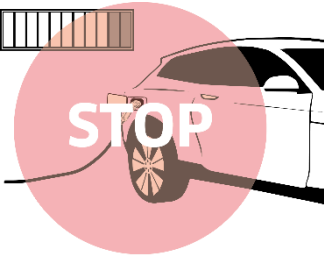


RFID Authorisation

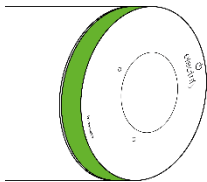
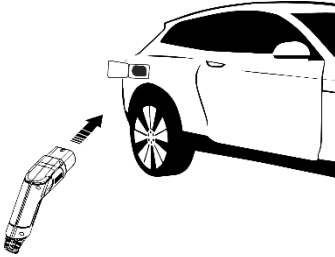
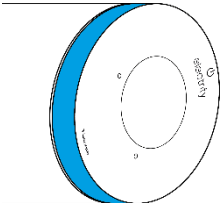
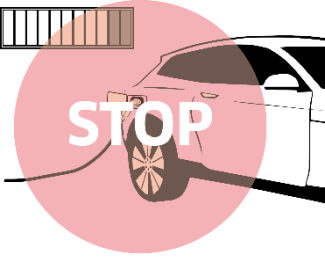
5.5 Charging Process

The charging process is controlled easily with just a few steps via RFID or app authorisation.

5.5.1 Charging Station with RFID Authorisation

Steps	Information	Graphic
1. First, check the operating status of the eBox	The eBox is ready for operation, indicated by a green LED light.	
2. Connect the charging plug to the vehicle to be charged.	Once the charging plug is successfully connected to the vehicle, it will be locked in place. For further information, please refer to the vehicle's operating manual.	
3. Authorise using the appropriate RFID card.	Hold the correct RFID card against the RFID card reader located at the top of the unit.	
4. The charging process will start.	After successful authorisation, charging will commence. The LED indicator will illuminate blue.	
5. To end the charging process prematurely.	The charging session can be terminated via the vehicle. Please refer to the vehicle's operating manual for instructions.	

5.5.2 Charging Station with App Authorisation

Steps	Information	Graphic
1. First, check the operational status of the eBox.	The eBox is ready for use when the LED indicator is green.	
2. Connect the charging plug to the vehicle to be charged.	Once the plug is successfully connected to the vehicle, it will be locked. Please refer to the vehicle's operating manual for further information.	
3. Authorise via the backend provider's app.	Authorise via the backend provider's app.	
4. The charging process starts.	After successful authorisation, the charging process is enabled. The LED indicator lights up blue.	
5. End the charging process prematurely.	The charging session can be ended via the vehicle. Please refer to the vehicle's operating manual for details.	

6 Troubleshooting



By purchasing your electrify eBox WR30, you have chosen a robust and compact design that ensures maximum operational safety and reliable charging for your electric and hybrid vehicle. With its intelligent control system, the eBox detects any faults and immediately stops operation. Should a malfunction occur during use, you will be informed via the LED indicator.

The following sections explain the steps you need to take for troubleshooting.

6.1 Troubleshooting

This chapter explains the actions you, as the user of the eBox charging unit, can independently carry out.

Fault	Possible Cause	Troubleshooting
The LED indicator of the eBox is not illuminated.	The residual current circuit breaker has tripped.	Check the distribution board of your building to ensure all circuit breakers are switched on.
Charging process cannot be started.	• The charging cable is not correctly connected to the vehicle. • The vehicle is preventing the charging process.	• Check the plug connection at the vehicle. • Initiate the charging process from the vehicle (refer to your vehicle's user manual).
The charging plug cannot be removed from the charging station.	The locking mechanism is not releasing properly.	• Place the RFID card on the reader again. • Attempt to stop the charging session from the vehicle side. • Disconnect the power supply to the charging station.
The LED indicator of the eBox is red.	Various errors may be present. Error logs must be reviewed.	Please consult the error logs of the charging station for further details.

6.2 Billing Data in Case of Communication Loss



If a communication error occurs on the encrypted RS-485 bus, the corresponding error message will be shown on the display, and the LED indicator will turn red.

The charging station will only become operational again after a restart.

The following detectable communication issues may occur on the encrypted RS-485 bus:

- No communication is detected on the internal bus for 1 minute
- The board is unable to send any data over the bus for 10 minutes
- The counterpart board does not respond on the bus for 10 minutes

When such an error is detected, any ongoing charging session is terminated, and a corresponding entry is logged in the legally compliant (calibration law) logbook.

In the event of one of the communication faults mentioned above, which leads to the termination of the charging session, the measured values remain intact as they are recorded directly by the energy meter. If a customer encounters this issue and sees outdated values displayed at the charging station, the backend operator can review the legally compliant logbook to identify the fault.

Since OCMF data includes not only the start and stop times but also the 15-minute interval transmission of measurement values, it is possible to trace back 10 minutes from the time of communication failure. This allows billing to be carried out up to the previous full 15-minute interval.

In the worst-case scenario, up to 25 minutes of charging data may be non-billable. At a full load of 22 kW, this corresponds to 9.166 kWh that cannot be billed.

This fault is highly unlikely, as it would require only one of the calibration-relevant boards to stop communicating.

If there is a complete communication failure, a 1-minute timeout would apply, meaning a maximum of 16 minutes of energy transfer would be non-billable.

This would correspond to 5.86 kWh that cannot be billed.

6.3 Repair Work



DANGER !

Safety notice regarding electrical hazards

Ensure that all cables are de-energised at the time of repair. Failure to observe this safety notice may result in a serious hazard involving life-threatening electric shock.

Repairs on the electrify eBox WR30 may only be carried out by qualified professionals. Please ensure that only replacement parts approved by hesotec electrify are used. If necessary, contact the manufacturer for further assistance.

7 Maintenance / Disposal



Danger !

Safety notice regarding the risk of electric shock.

Ensure that all cables are de-energised during maintenance. Failure to observe this safety notice may result in life-threatening electric shock.

The electrify eBox wr30 charging units by hesotec electrify are generally designed to be maintenance-free. However, regular visual inspections should be carried out at appropriate intervals.

7.1 Maintenance Work

hesotec electrify recommends performing an inspection every 6 months.

Charging Unit

- Check the charging unit for any visible damage or defects.
- Verify the functionality of the charging plug.
- Inspect the charging cable for any signs of damage.
- Check that the eBox is securely mounted to the wall.
- Ensure that all plug connections are properly connected.



NOTE !

Important information and special considerations

We recommend using a rubber conditioner for the cable to prevent discoloration and other signs of ageing.

7.2 Disposal

Electronic waste must be disposed of in accordance with the current regulations and disposal guidelines of the respective location. Disposal with household waste is strictly prohibited! Please use only designated collection points for electronic waste or dispose of it through a specialised retailer. Disposal of packaging materials can be done via collection points for paper and plastics.

8 Appendix

8.1 CE Marking and Declaration of Conformity

The electrify eBox by hesotec electrify is CE-marked. A copy of the Declaration of Conformity is provided later in this manual. It is also available upon request from hesotec electrify GmbH.

ZERTIFIKAT / CERTIFICATE



CE - KONFORMITÄTSERKLÄRUNG CE - DECLARATION OF CONFORMITY

Hersteller Manufacturer	hesotec gmbh Rubbetskath 34 46539 Dinslaken / Germany
Produkte Products	electrify eBox / eSat electrify eBox / eSat
Typenbezeichnungen Type designations	wr30-R · wr30-L / r10 · r20 wr30-R · wr30-L / r10 · r20
Die Forderungen folgender europäischer Richtlinien werden erfüllt In conformity with the following european directives	Niederspannungsrichtlinie 2014 / 35 / EU RED Richtlinie 2014 / 53 / EU EMV Richtlinie 2014 / 30 / EU Low Voltage Directive 2014 / 35 / EU Radio Equipment Directive 2014 / 53 / EU EMC Directive 2014 / 30 / EU
Angewendete Normen (harmonisiert) Applied standards (harmonized)	DIN EN 61851-1:2019 DIN IEC 61851-22:2002 DIN EN 55011:2016 DIN EN 61000-6-2:2019 DIN EN 61000-6-3:2021 DIN EN 61000-3-11:2019 DIN EN 61000-3-12:2011 DIN EN 61000-4-11:2020 DIN 61439-7:2020 VDE-AR-N 4100
Jahr der CE-Kennzeichnung Year of CE-declaration	2024 2024

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Fax. +49 (0) 60105-50
electrify@hesotec.de

14.02.2024

Datum
Date

Unterschrift
Signatur

Sebastian Hellmich
Sebastian Hellmich

- Geschäftsführer -
- Managing director -

Diese Erklärung bescheinigt die Übereinstimmung mit den oben genannten Richtlinien und beinhaltet keine Zusicherung von Eigenschaften. This declaration certifies the conformity to the specified directives but contains no assurance of properties.

9 Glossary

Baumusterprüfbescheinigung (BMP)

With the Measuring and Calibration Act of 25 July 2013 (BGBl I p. 2722 ff.) and the Measuring and Calibration Ordinance of 11 December 2014 (BGBl I p. 2010 ff.), Germany's legal metrology system was overhauled. European product directives—particularly those concerning measuring instruments—were transposed into German law, and national regulations were aligned with EU requirements. The most significant change in the new framework was the abolition of official “initial verifications” (“Ersteichung”), replaced by a manufacturer-led conformity assessment procedure as a prerequisite for placing legally regulated measuring instruments on the market. In place of governmental type approvals and initial verifications, manufacturers now obtain a private-law Type Examination Certificate (Baumusterprüfbescheinigung) and issue their own Declaration of Conformity. (Source: www.lbme.nrw.de)

Charge Point Operator (CPO)

A Charge Point Operator (CPO) is an installer and operator of charging stations for electric vehicles.

electrify Charge Control App (eCC App)

The eCC App is the smart access point for your charging infrastructure. All electrify charging stations and wall-boxes can be controlled and configured via the eCC App.

electrify Charge Control Protocol (eCCP)

The eCCP is an electrify application protocol that enables communication between the charging point and the eLMS.

electrify Load Management System (eLMS)

With the cloud-based eLMS, you can manage your charging infrastructure—whether a single charging point or an entire charging park. The eLMS provides an overview of activated charging points, energy consumption, and charging status.

electrify Partner Portal (ePP)

An information portal for sales and installation partners.

OCPP (Open Charge Point Protocol)

OCPP is an open, universal application protocol that standardises communication between electric vehicle (EV) charging stations and a central management system (backend). It is comparable to the communication protocols used in mobile networks.

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