

Kathrein eMobility

Wallboxes for domestic, commercial and public applications



KATHREIN



Kathrein. Reliable. Innovative. Professional.

Kathrein is a mark of quality established for more than 100 years and is a company with a rich heritage that delivers innovative technologies - Made in Germany. Continuing the long company history and true to its market-leading commitment to quality, Kathrein is helping to shape the future of electric mobility. Innovative solutions for customer-oriented charging infrastructures

are making a significant contribution to sustainable energy solutions. The E-mobility business unit supplies charging solutions and services, calling on the extensive technological knowledge, development expertise and manufacturing capabilities of the Kathrein group. This end-to-end value chain guarantees "Made in Germany" quality for customers and partners.

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> Overview



- Includes two NFC tag keyrings (red and white labels)
- Additional MFC tags (keyring or debit card) available as accessories

Exclusive design

Available in white or anthracite to suit any type of surroundings.

RFID interface

Use RFID cards for easy administration of wallbox access rights.

Safe housing

Sturdy, splash-proof housing thanks to IK 10 and IP 54 protection.





LED indicator

The LED indicator uses a range of colours and modes to indicate the current status of the wallbox.

Charger cable*

High-quality, sturdy charger cable, available in lengths of either 5 m or 7.5 m.

Type-2 connection in accordance with IEC 62196-2

The standard charger plug for electric cars, including protective cap.



* Cable not included with variant with socket

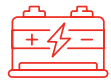
> Key facts at a glance



Key functions:
Load management,
PV surplus charging,
single and cluster mode,
automatic phase switching



Compliance with German calibration law:
MID meter, MessEG and MessEV
Conformity:
CE, VDE



Power ranges:
11 and 22 kW



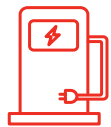
Future-proof:
Regular software updates



Networking:
OCPP, TCP/IP,
LAN, WLAN, LTE



Subsidy options:
KfW (Germany)



Accessories:
Mounting stands,
fittings



Robust:
IK10 impact protection,
IP54 splash-proofing



User-friendly:
Web interface,
apps



Colours:
White, anthracite, custom
colours available on request





- **Automatic 1/3-phase switching**
Adaptive power adjustment for low charging output
- **3-way phase detection**
Detection of phase failures for increased operational reliability
- **Redundant self-supply**
Increased availability and operational reliability thanks to redundant 3-phase power supply
- **Charging socket emergency release mechanism**
Charging socket releases cable safely and automatically in case of power failure
- **Charging power measurement**
MID counter (view window in side of housing)
- **Built-in 2-way Ethernet switch**
Ethernet chaining for easier network installation
- **LED status indication**
Indicates charging modes and error statuses

> Applications

▪ Domestic applications

Single-family dwelling

- Charging point with 11 kW or 22 kW charging output
- Authentication via RFID, app or “free charging”
- Networking via LAN/WLAN/LTE
- Energy measurement using MID-certified meter
- Networks with PV system via Modbus TCP
- Automatic 1 and 3-phase switching
- Load management for cluster operation
- App and web interface
- Compliance with German calibration law on request



■ **Commercial applications**

Employee parking area (e.g. company car park)

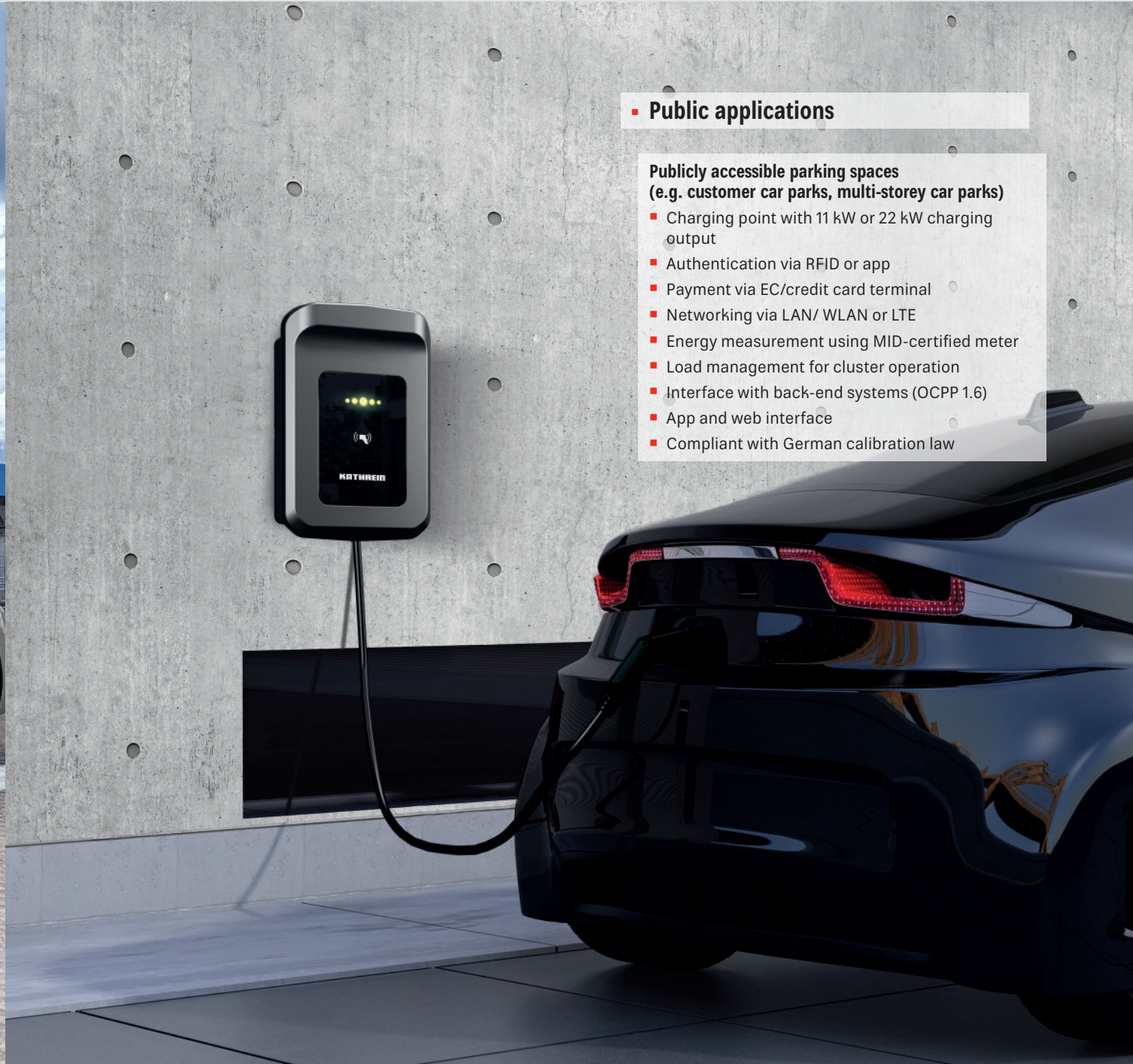
- Charging point with 11 kW or 22 kW charging output
- Authentication via RFID, app or "free charging"
- Networking via LAN/WLAN/LTE
- Energy measurement using MID-certified meter
- Networks with PV system via Modbus TCP
- Automatic 1 and 3-phase switching
- Load management for cluster operation
- Interface with back-end systems (OCPP 1.6)
- App and web interface
- Compliance with German calibration law on request



■ **Public applications**

Publicly accessible parking spaces (e.g. customer car parks, multi-storey car parks)

- Charging point with 11 kW or 22 kW charging output
- Authentication via RFID or app
- Payment via EC/credit card terminal
- Networking via LAN/ WLAN or LTE
- Energy measurement using MID-certified meter
- Load management for cluster operation
- Interface with back-end systems (OCPP 1.6)
- App and web interface
- Compliant with German calibration law

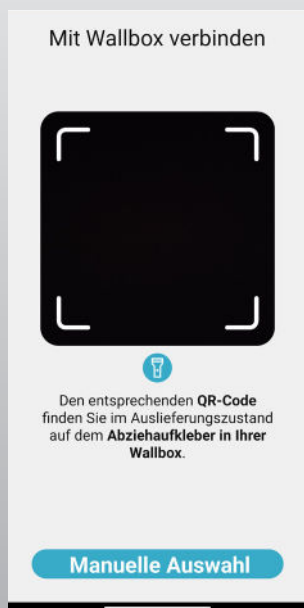


> easyInstall app

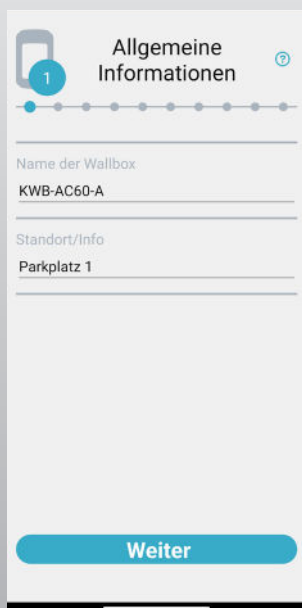


■ easyInstall (installation app)

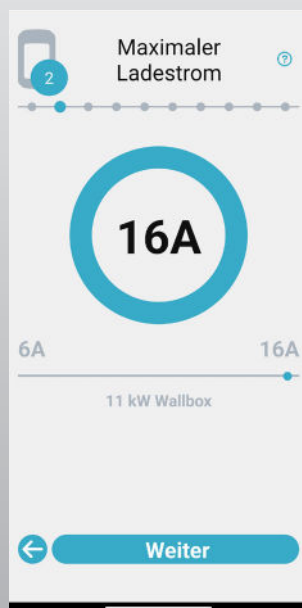
- Configuration
- Wallbox commissioning
- Automatically generates an installation log



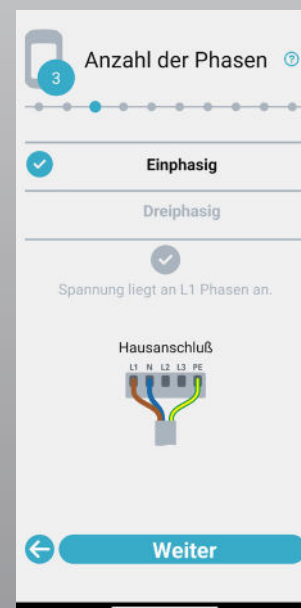
Connection/
scan QR code



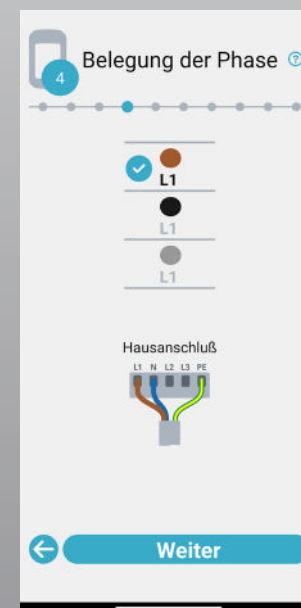
1. General
information



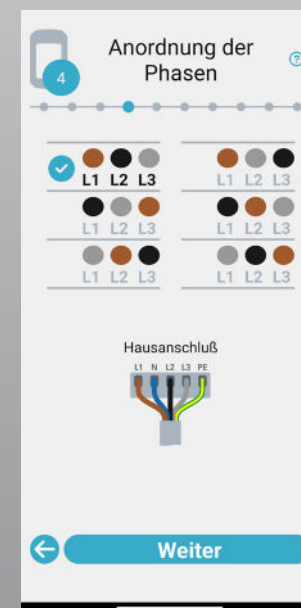
2. Max. charging
current



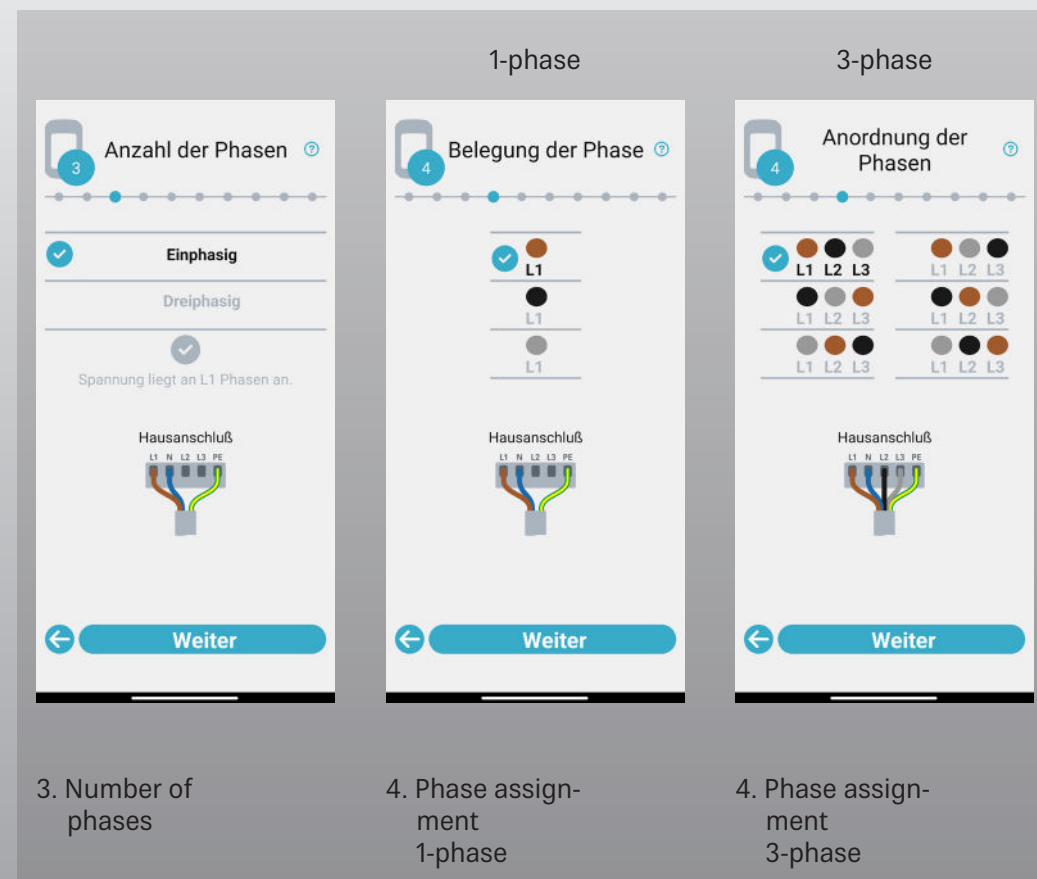
3. Number of
phases

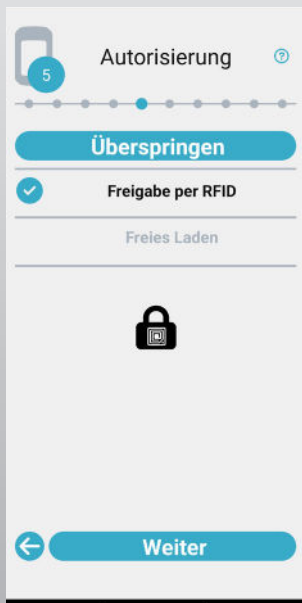


4. Phase assign-
ment
1-phase

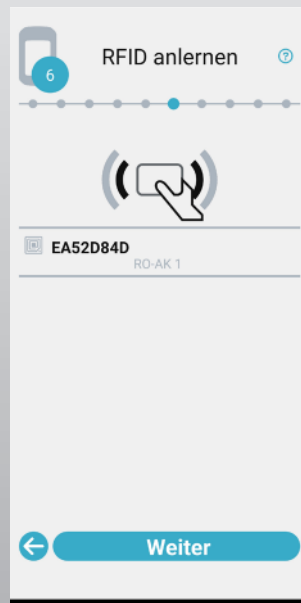
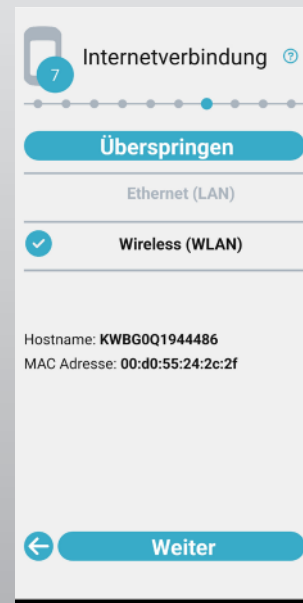
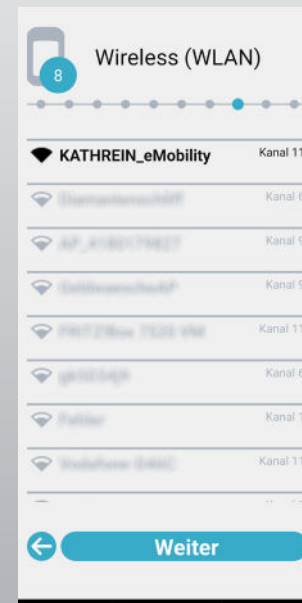
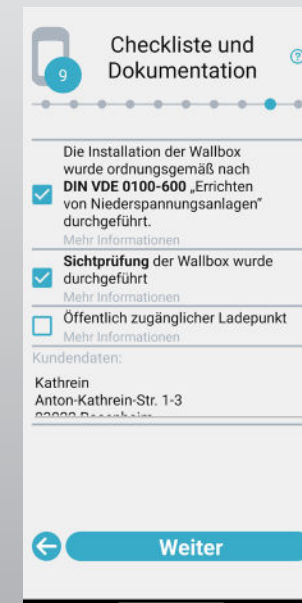


4. Phase assign-
ment
3-phase



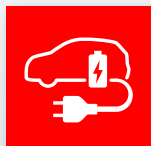


5. Authorisation

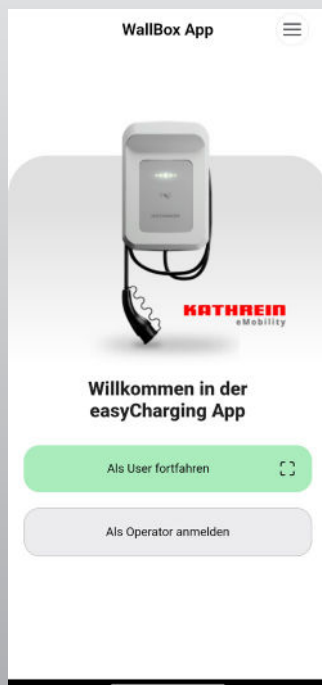
6. Teach
RFID tag7. Set up Internet
connection
(LAN or WLAN)8. Select WLAN
network9. Check-list and
documentation

Summary

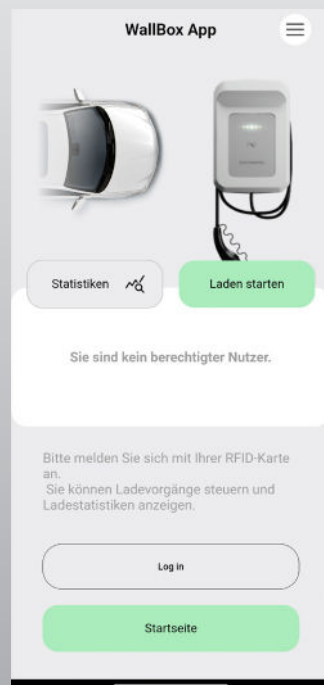
> easyCharging app



- **easyCharging (user app)**
 - Manage charging procedure
 - View charging statistics
 - Add RFID cards



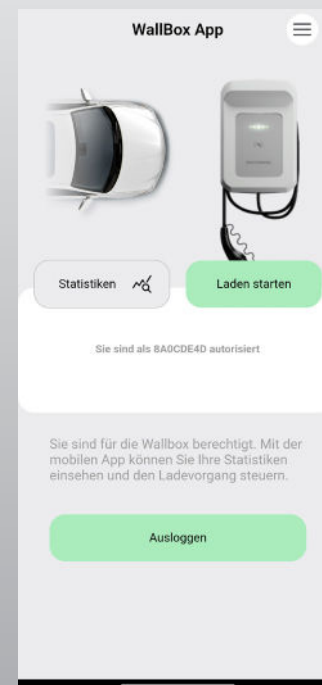
1. Start page



2. User access



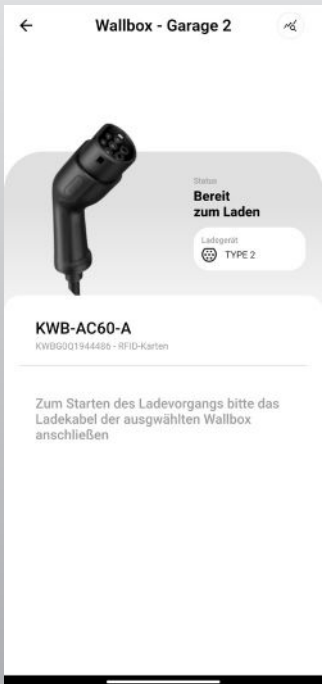
3. User login with RFID tag



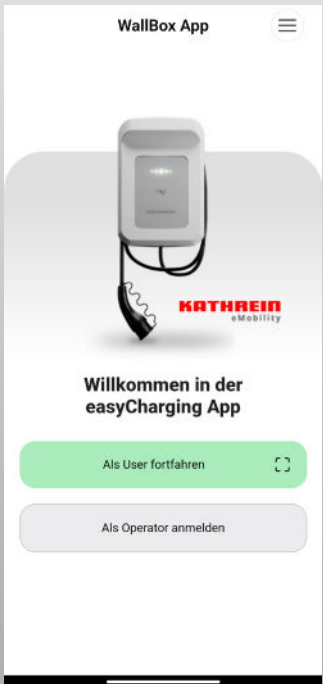
4. User home screen



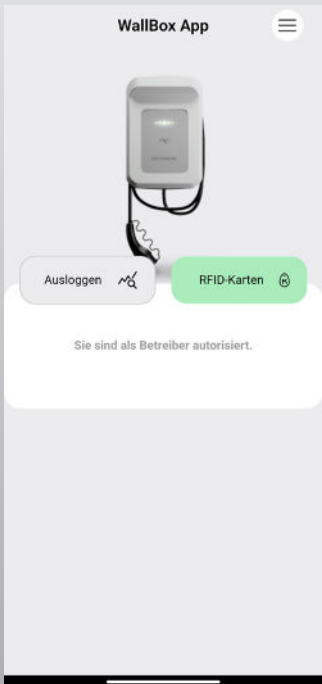
5. Statistics



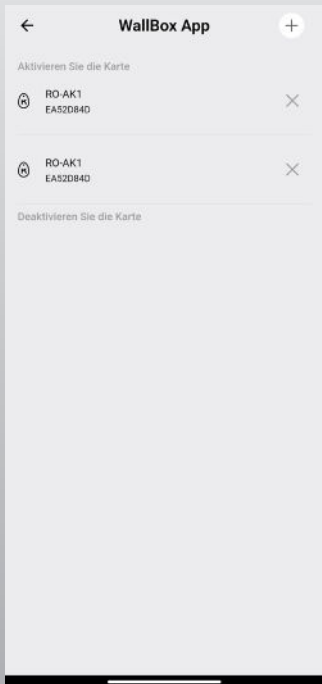
6. Charging procedures



7. Operator access



8. RFID teaching



9. RFID admin

> Web interface – Main overview

→ Parkplatz 2.05

Wallbox mit Dose

0 h 13 min
0.61 kWh

8AEAD94D

⚡ 2.84 kW (max. 9.0 kW) · 🕒 07:48 Uhr

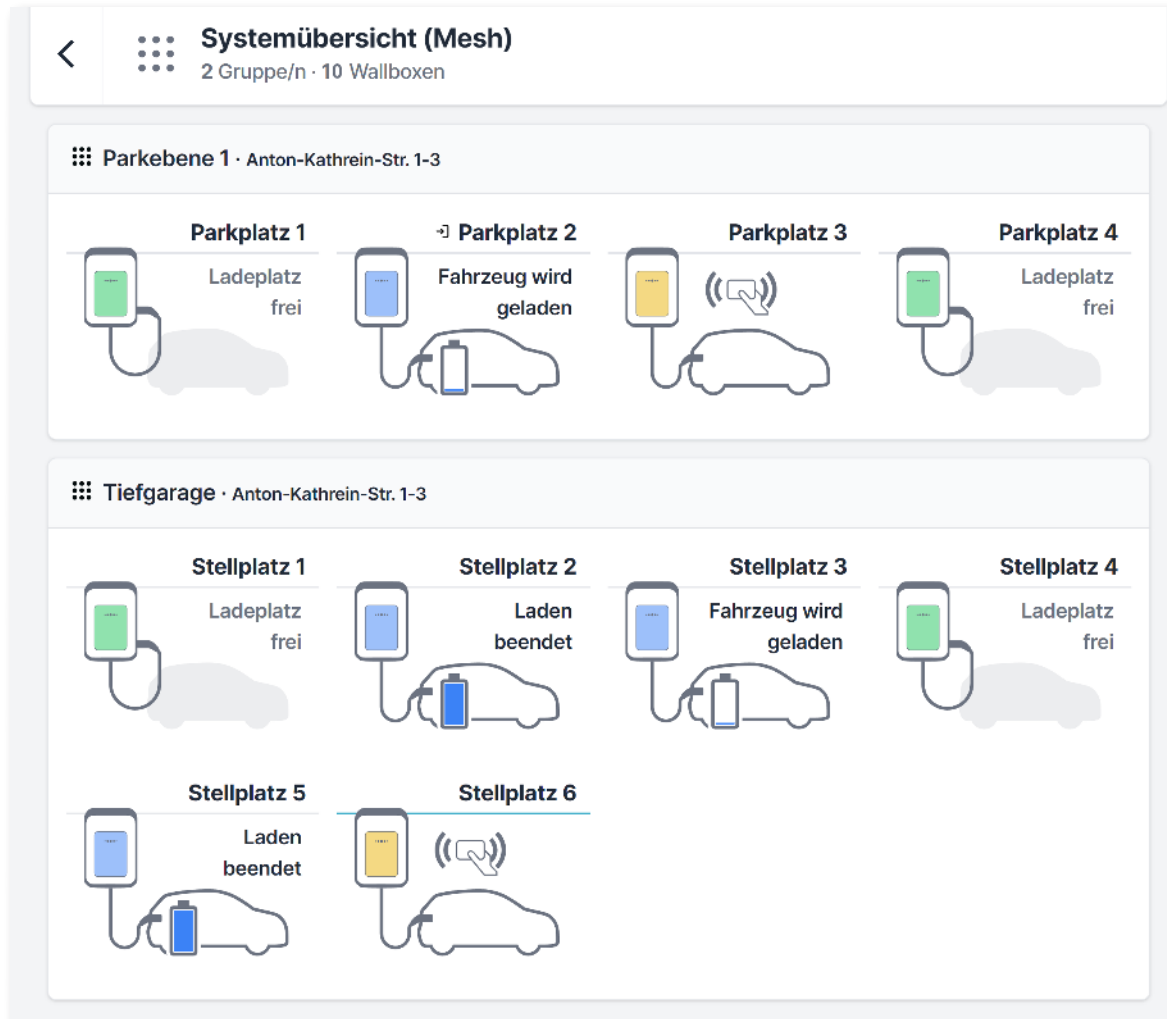
Seriennummer: G0Q2148474 · IP: 10.20.96.90

- Systemübersicht (Mesh 10 Wallboxen)
- Ladevorgänge
- RFID-Verwaltung
- Energiezähler (MID)
- Mesh-System verwalten
- Einstellungen

▪ Web interface overview

- Intuitive menu
- Real-time status for wallbox and current charging procedure
- Overview of charging procedures
- RFID admin
- Reading the current MID counter status (3-phase)
 - Reading voltage, current and output per phase
 - Displays the current grid frequency
- Overview and admin of the mesh system

> Web interface – Mesh system



■ Overview and admin of the mesh system

- Overview of the current status of all wallboxes on network
- Admin of **all** wallboxes in mesh
- Direct selection for access to individual wallboxes
- Easy group creation
- Allocate wallboxes to groups using drag and drop

➤ Web interface – Charging procedures and RFID admin

Ladevorgänge
der letzten 30 Tage: 28 Ladungen · 294,1 kWh · 117,51 €

• Parkplatz 2.05 25.09.2023 bis 25.10.2023

Alle RFIDs Export CSV

▼ 2023 28 Ladungen · 294,1 kWh · 117,51 €

▼ Oktober 2023 24 Ladungen · 261,9 kWh · 104,07 €

- Di 24.10. - 11:17 Uhr · Parkplatz 2.05
⌚ 6 h 20 min ⚡ 48,5 kWh 💰 19,41 €
- Di 24.10. - 07:49 Uhr · Parkplatz 2.05
⌚ 3 h 06 min ⚡ 5,8 kWh 💰 2,30 €
- Mo 23.10. - 07:42 Uhr · Parkplatz 2.05
⌚ 4 h 28 min ⚡ 6,2 kWh 💰 2,49 €
- Fr 20.10. - 07:50 Uhr · Parkplatz 2.05
⌚ 6 h 27 min ⚡ 4,9 kWh 💰 1,94 €
- Do 19.10. - 14:56 Uhr · Parkplatz 2.05
⌚ 3 h 31 min ⚡ 25,2 kWh 💰 10,08 €

▪ Overview of charging procedures

- Select individual wallboxes or wallbox groups
- Display all wallbox charging procedures in mesh
- Select charging procedures within an individual time range
- Select individual users
- Preset month and date selection
- Display costs per charging procedure with price saved in system
- Export function with automatic price calculation

RFID-Verwaltung
6 auf Parkplatz 2.05

• Parkplatz 2.05 RFID anlernen RFID hinzufügen Export CSV

▼ Parkplatz 2.05 6 RFIDs

- 048452DAF10F90 AKTIV
048452DAF10F90 - ⌚ 16.10.2023 08:56 Uhr
- 5AE9D94D AKTIV
5AE9D94D - ⌚ 15.09.2023 15:12 Uhr
- 8AEAD94D AKTIV
8AEAD94D - ⌚ 19.09.2023 14:57 Uhr
- 04E51DDA551390 AKTIV
04E51DDA551390 - ⌚ 15.09.2023 15:09 Uhr
- 048257DA551391 AKTIV
048257DA551391 - ⌚ 15.09.2023 15:03 Uhr
- EA19D84D AKTIV
EA19D84D - ⌚ 15.09.2023 15:12 Uhr

▪ RFID admin

- RFID tags for easy user admin
- Automatic and manual RFID teaching
- Easy labelling and colour coding
- Quick blocking and unblocking of RFID tags
- Easy allocation of RFID tags to wallboxes and groups
- Information export function for all RFID tags

> Web interface – Settings

The main screenshot displays the 'Einstellungen' (Settings) page for 'Wallbox 513' under the 'Allgemein' tab. It includes the following sections:

- Name der Wallbox:** Parkhaus 2.01
- Info zur Wallbox:** mit Ladekabel
- kWh Preis für Statistik in Euro:** 0,32
- Freies Laden ohne Freigabe (RFID):** Aus
- Begrenzung der maximalen Ladeleistung:** 11,04 kW (16 Ampere)
- Installierte Software-Versionen:** SW-Version: 1.2.6, OS-Version: 1.0.10, API-Version: 1.6
- Ungfähige Ladedauer je Lademenge:**

35 kW	3 h 10 min
50 kW	4 h 31 min
75 kW	6 h 47 min

Buttons at the bottom include 'Speichern' (Save) and 'Neustart der Wallbox' (Restart Wallbox).

Other screenshots show:

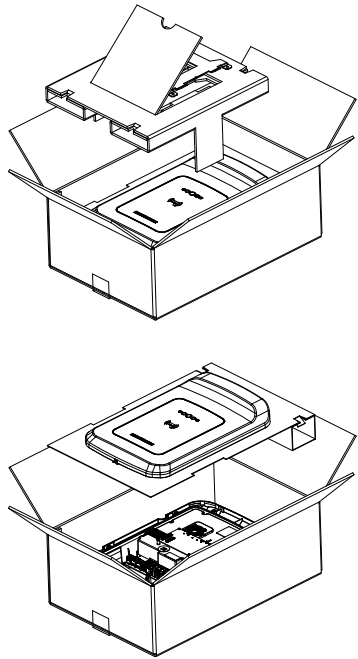
- PV Überschuss:** Settings for PV surplus charging, including 'aktuelle Überschuss Haus: 1 W'.
- OCPP:** OCPP settings, showing 'OCPP-Server ist verbunden'.
- Update:** Software update status, showing 'Aktuell auf der Wallbox installiert: Version 1.0.10' and 'Neue Software verfügbar: Version 1.0.0'.
- Netzwerk:** Network settings, including 'WLAN (WLAN)' selection and IP configuration.

- Adjusting the charging current
- Setting the electricity price in kWh
- OCPP settings
- PV surplus charging settings
- Wallbox updates
- Network settings

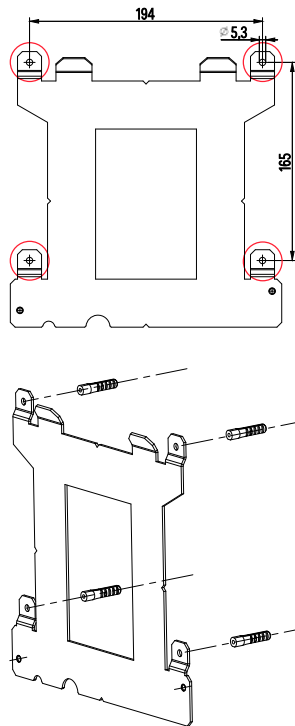


> Smart installation concept

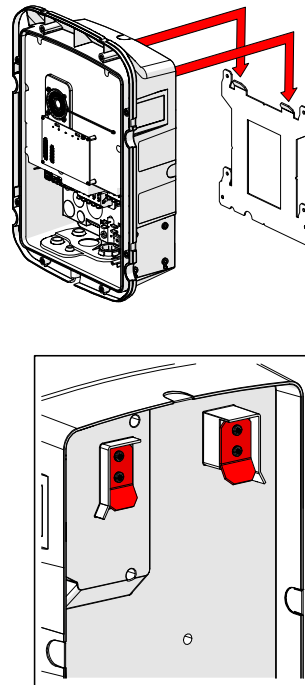
- **Unpack your wallbox**



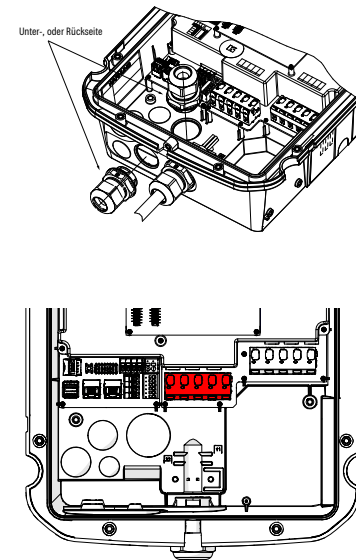
- **Install the wall bracket**



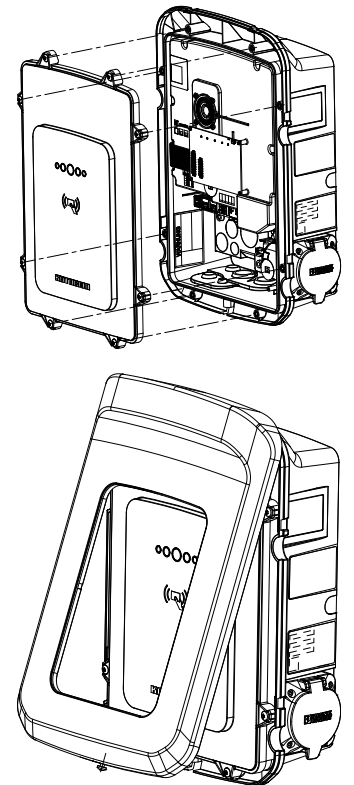
- **Attach your wallbox**



- **Connect to the power supply**



- **Attach the cover**



> **KATHREIN eMobility and its benefits to you**

- **MADE IN GERMANY** – From development to production
- Local support thanks to more than 10 certifies eMobility Sales Managers
- Support hotline based in Germany
- A reliable partner – one of the biggest names in electrical craftsmanship for over 100 years



> Our wallbox models in compliance with German calibration law

Our KATHREIN charging stations are also available as models that comply with German calibration laws. Charging procedures that comply with these laws ensure compliance with German legislation on measurement and calibration, and make sure that the user data collected is processed in accordance with data protection regulations. Choose between a charging output of 11 kW or 22 kW, built-in charger cable or charger socket, RFID and app authentication or Plug & Charge (identification via vehicle). LAN, WLAN or LTE networking. Choose the best option to suit your needs. Additional options are also available, such as interfaces with smart home technology, PV systems or back-end systems. Alternatively, you can use the automatic cluster function and the local load management system (monitoring/documentation/archiving) for the charging procedure via our app or web platform. Check out our electric wallbox models and see for yourself the huge range of functions they offer.

You know what you need – we've got the solutions. KATHREIN's AC40E and AC60E wallbox models fulfil the highest of standards for public use.



> Technical data

General data				
Operating voltage (1L1N/3L1N)	230 VAC (1-phase)/400 VAC (3-phase)			
Operating current 11 kW	3 x 16 A max.			
Operating current 22 kW	3 x 32 A max.			
Dimensions (H x W x D) [mm]	440 x 300 x 159/139			
Cable length	5 m, 7.5 m Calibration law variant 5 m			
Impact resistance (IEC 62262) IP protection class	IK 10 IP 54			
Versions complying with German calibration law				
Function	KWB-AC40	KWB-AC60	KWB-AC40E	KWB-AC60E
Charging output – 11 kW 22 kW	✓ ✓	✓ ✓	✓ ✓	✓ ✓
Connection – Cable Socket	✓ ✓	✓ ✓	✓ ✓	✓ ✓
DC fault current detection (6 mA)	✓	✓	✓	✓
Automatic phase switching	✓	✓	✓	✓
Charging mode 3 (IEC 61851-1 – CP/PP)	✓	✓	✓	✓
Plug & Charge (free charging)	✓	✓	✓	✓
User authentication – RFID	✓	✓	✓	✓
Energy meter (certified to MID)	✓	✓	✓	✓
Networking – LAN	✓	✓	✓	✓
Networking – WLAN	✓	✓	✓	✓
Networking – LTE	-	✓	-	✓
Networking – MODBUS EEBUS**	✓ ✓	✓ ✓	✓ ✓	✓ ✓
OCPP 1.6 (management interface)*	✓	✓	✓	✓
Photovoltaic surplus charging	✓	✓	✓	✓
Load management - static dynamic adaptive***	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
Cluster mode (master/slave)	✓	✓	✓	✓
App / web interface	✓	✓	✓	✓
Compliance with German calibration law	-	-	✓	✓

* Back-end OCPP 2.0 available mid-2024 | ** EEBus available mid-2024 | *** Static/dynamic load management included, adaptive load management subject to licence | **** ISO 15118 interface available Q2/Q3 2024

> White label solutions Your wallbox in your corporate design

Use the clear design of your new KATHREIN wallbox to promote your business. With the wide range of design options we offer, you can create a custom design to suit your exact needs. Choose from a huge variety of colour and labelling options, and optimise your innovative charging stations to match your company's public image.

Easy handling and smooth charging, all in your corporate design. Choose between charging outputs of 11 kW and 22 kW, stationary and mobile cable options, and from a wide range of functions to suit your individual charging infrastructure.

Paint the future of electromobility in your corporate colours!





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www.kathrein-gmbh.at

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