

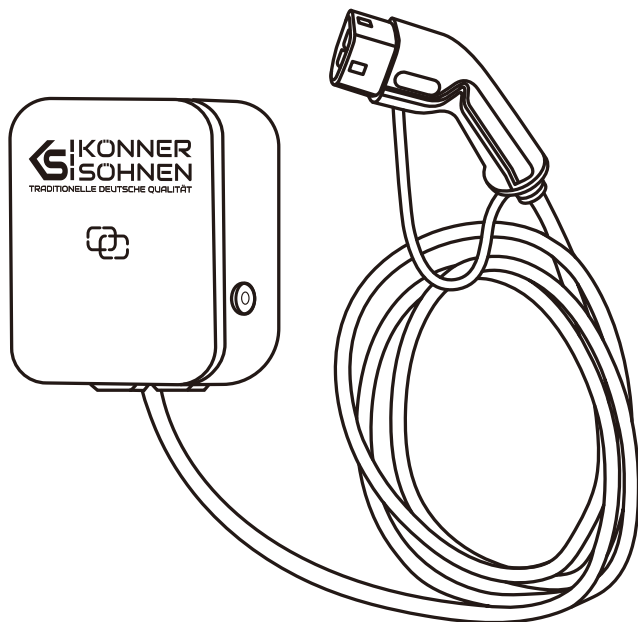
Please, read this manual
carefully before use!

Owner's Manual



Charging station for electric vehicle

KS P32/1
KS P16/3
KS P32/3





Thank you for your purchase of **Könnner & Söhnen®** products. This manual contains a brief description of safety, use and debugging. More information can be found on the official manufacturer's website in the support section: konner-sohnen.com/manuals

You can also go to the support section and download the full version of the manual by scanning the QR code, or on the website of the official importer of Könnner & Söhnen products: www.konner-sohnen.com



We care about the environment, therefore, we consider it expedient to save paper and leave in print a short description of the most important sections.



Be sure to read the full version of the manual before getting started!



Manufacturer reserves the right to make alterations into the generators, which may not be reflected in this manual. Pictures and photos of the product may vary from its actual appearance. At the end of this manual, You may find contact information which you are free to use in case of any issues occurrence.

All data, specified in this operation manual is the most up to date for the moment of its publishing. The current list of service centers you can find at the website of official importer: www.konner-sohnen.com



ATTENTION – DANGER!



Failure to follow the recommendations marked with this sign may lead to serious injury or death of the operator or third parties.



IMPORTANT!



Useful information while operating the machine.

INSTALLATION

- The charging station for electric vehicles must be installed on a solid, non-combustible surface.
- The charging station for electric vehicles cannot be installed in places where explosive gas is present.
- Never store flammable or explosive substances near the charging station.
- The charging station for electric vehicles should be installed in an area free of conductive dust and gases or vapors that can destroy metal coatings and insulation. The charging station must be protected from rain, moisture and direct sunlight.
- The charging station for electric vehicles should be installed in an area free from strong vibrations that could damage its components.
- The charging station should be installed in an upright position for adequate ventilation and heat dissipation.
- The installation site must be above ground level, and, where necessary, a water outlet, such as a drain gutter or similar, must be installed to prevent moisture from entering the station.
- Electrical installation work must be carried out by a qualified electrician according to all applicable standards and regulations. An installation permit must be obtained if required by law.
- Before performing electrical installation, ensure that the power supply is completely disconnected to prevent the risk of electric shock.
- The PE (ground) terminal of the charging station must be securely connected to ground.
- The supply cable of the charging station must be secured to prevent it from being damaged.
- Do not leave metal objects inside the charging station that could cause a short circuit and fire or failure of the station components.
- The supply cable of the charging station must be securely connected to the input terminal to prevent overheating and damage to the station.

OPERATION

- Users of the charging station must be familiar with the safety precautions and regulations and adhere to them.
- Never use the charging station in an emergency, such as fire, smoke, flooding, etc.
- Never use the charging station if the charging plug, charging cable, or station itself shows signs of physical damage, is heavily soiled, flooded, or has been exposed to flammable, corrosive chemicals, etc.
- During charging, switch off the electric vehicle and set the parking brake.
- Do not modify the device.
- Before using the charging station, check the cable and plug for damage and soiling.
- When disconnecting the charging cable from the electric vehicle, always pull by the plug, not the cable.
- Do not charge your electric vehicle in the rain or thunderstorm.

MAINTENANCE

- Before each use, inspect the charging station for possible damage.
- Regular functional checks of the charging station, including safety features, must be carried out by a duly authorized and qualified electrician within the time limits stipulated by applicable legislation.

CHARGING MODE

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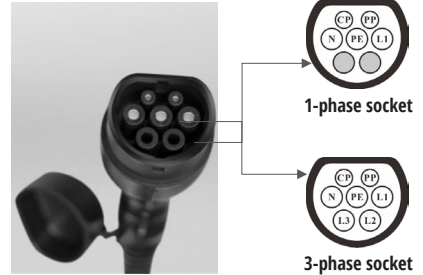
The charging mode of KS P series product is Mode 3.

Mode 3 — is a method for the connection of an EV to an AC EV supply equipment permanently connected to an AC supply network, with the CP (Control Pilot) function for the transmission of the approved charging parameters to the electric vehicle.

CHARGING CONNECTION

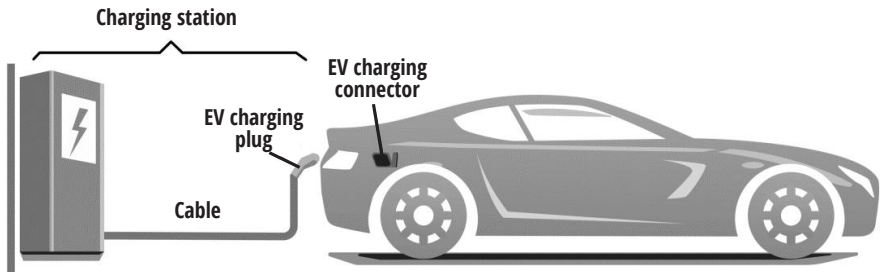
The charging stations comply with EN IEC 61851-1:2019.

Connection of the electric vehicle to the power grid with the electric vehicle's charging cable and connector permanently connected to the charging station.



CHARGING INTERFACE

- The KS P charging plug conforms to IEC 62196-2, Type 2 plug (with charging cable).



SPECIFICATIONS

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Model	KS P32/1	KS P16/3	KS P32/3
Number of phases	1	3	3
Rated voltage, V	230	400	400
Rated current, A	32	16	32
Rated power, kW	7	11	22
Charging cable length, m	5	5	5
Recommended power supply cable (copper), mm ²	3x4 3x6	5x4 5x6	5x4 5x6
Input terminals	L/N/PE	L1/L2/L3/N/PE	
Charging connector type	Type 2	Type 2	Type 2
Dimensions (LxWxH), mm	450x380x150	450x380x150	450x380x150
Weight, kg	6	6	6
Protection class	IP65	IP65	IP65

FUNCTIONAL DESCRIPTION

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Function	Description
Charging mode	Mode 3
Local control	“Plug-and-charge” or “swipe card-controlled”
Indicator lights	ALED panel indicate 9 statuses
Interface	Bluetooth
Built-in protection	Overvoltage protection, overtemperature/overvoltage/undervoltage, overcurrent protection, fault, ground protection for TN system (TN-C, TN-S and TN-C-S)
Residual Current Monitoring Unit (RCMU)	Yes

INSTALLATION LOCATION: Indoor or outdoor, good ventilation, no flammable, explosive gases.

CHARGING CABLE: 5m (Standard configuration).

MOUNTING: Wall-mounted.

INSTALLATION

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SPACE REQUIREMENT:

Space requirement: When the charging station is fixed on the wall, the minimum space requirements are shown in Fig. 1.

It is suggested that the charging station should be installed in a place with good ventilation, no direct sunlight and shelter from wind and rain. In order to ensure good ventilation condition, you should mount the charging station vertically and leave enough space.

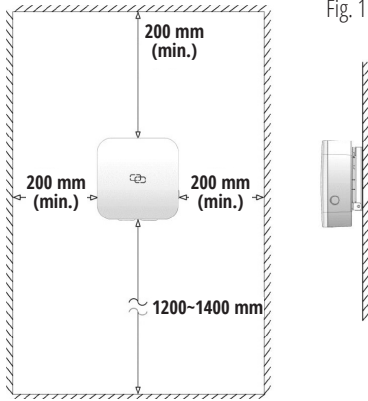


Fig. 1

TOOLS FOR INSTALLATION

	Multimeter	Check the electrical connection and measure the voltage
	Electric Impact drill	Drill fixing holes in the wall
	Wrench	Fastening bolt
	Diagonal plier	Cut the cable
	Wire stripper	Peeling cables
	Crimping plier	Pressed cable terminal
	Cross screwdriver	Fastening screw

POWER SUPPLY SYSTEM

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TN: "T" indicates that the neutral point of the power system is directly grounded.

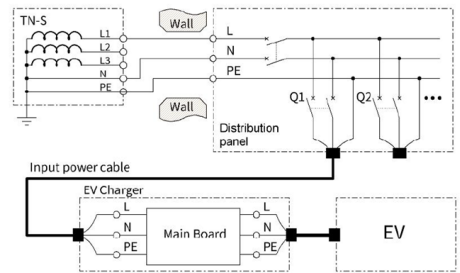
"N" — the earth connection is supplied by the electricity supply network, either separately to the neutral conductor (TN-S) or combined with the neutral conductor (TN-C).

PE is the protective earth conductor.

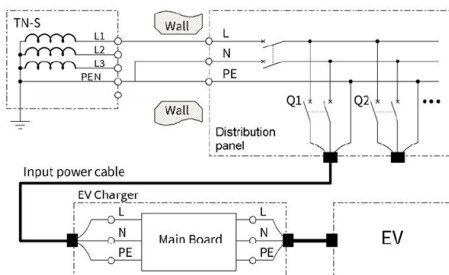
PEN is the combined protective earth conductor and neutral conductor.

KS P series products are designed for installation in earthed power supply systems.

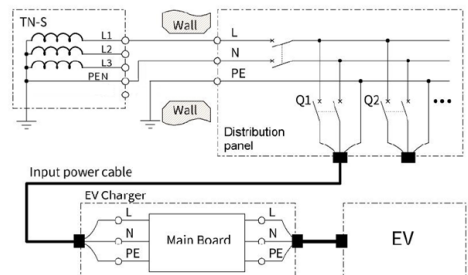
a). Connection to the TN-S power supply system.



b). Connection to the TN-C power supply system.



c). Connection to the TT power supply system requires the grounding connection.



INSTALLATION STEPS:

Install the Charging station on the wall follow the steps as below.

STEP 1. DRILLING. Drill 4 mounting holes with a diameter of 6 mm and a depth of at least 50 mm on the wall to install the wall mount (Fig. 2).

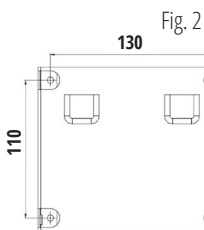


Fig. 2

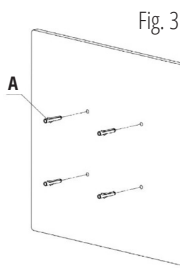


Fig. 3

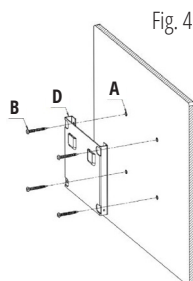


Fig. 4

STEP 2. FIX THE WALLBOX. As shown in Fig. 3 and Fig. 4, install the wall mount.

Fit the wall box onto the wall mount D, as shown in Fig. 4.

STEP 3. WIRING.

Connect the supply cable and charging cable to the respective terminal, as shown in Fig. 5.

1. Input power cable
2. Charging cable

The installation is complete.

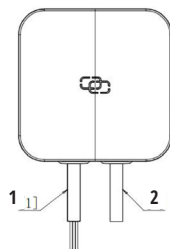
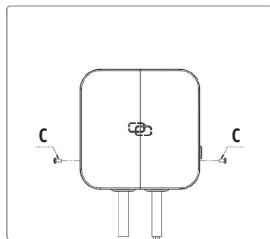
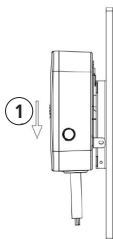


Fig. 5

EMPTY SOCKET

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The charging station comes with an empty socket for a Type 2 plug. The empty socket should be placed conveniently near the charging station. When the charging station is in standby mode, insert the charging plug into the empty socket to protect it from damage.

OPERATION

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POWER ON

After the charging station has been installed and confirmed, switch on the power supply. The indicator light lights up and the charging station switches to standby state.

Indicator lights A: it is used to show indicate system status

Different options to activate and terminate the charging process (to be adjusted in the station settings)

1. RFID card: Hold the RFID card in front of the card reader to start or stop charging.
2. Charging control button: Press the button B to start or stop charging.



LED INDICATORS

The LED indicators on the panel are used to indicate the status of the charging station and the various combinations of indicators are described as below.

Indicator Color	Connotation
Red-Green-Blue	LED power on self test
Green	Green On: Standby status
Blue	On: Connected to an EV Twinkle: Start charging state The LED power is on: Charging status
Purple	Twinkle: Charge-end status
Red-yellow (alternate)	Fault – status: detail on Chapter 9
Red-blue (alternate)	Upgrade - status

START CHARGING

- Park your electric vehicle in a charging spot, switch it off and set the parking brake.
- Remove the charging plug from the charging station socket.
- As shown in Fig. 6, insert the charging plug into the charging socket of the electric car and observe the CONNECT LED of the charging station light up.
- In "Plug and Charge" mode, the charging process starts automatically once the charging cable is plugged into the EV socket.
- In Scan QR Code" mode, follow the instructions that appear on the display when the charging plug is connected to the EV socket. The charging process is initiated by scanning a QR code in the app (Fig. 7).



NOTE

- For charging by QR code on the screen, you must first download and install the WE E-Charge app.
- Scan the QR code on the right to download the WE E-Charge APP for Android phone.
- Search WE E-Charge in APP Store to install iOS version APP.

WE E-CHARGE APP



TERMINATING CHARGING

- The charging station automatically stops charging when the electric vehicle is fully charged.
- For Plug and Charge, you can manually stop charging as follows: Press the electric vehicle release button to stop charging the electric vehicle (requires electric vehicle support) or unplug the charging cable from the EV socket. When the "Charging" indicator goes off, the charging process is terminated.
- For "Swipe Card" mode, swipe the card again and observe the Charging indicator go off, indicating that the charging process has stopped.
- For "Scan QR Code" mode, press the stop charging button in your app, and charging will stop.
- When charging has stopped, disconnect the charging plug from the electric car.

ABNORMALLY STOP CHARGING

- Emergency stop:** At any time, in case of any emergency (such as fire, smoke, abnormal noise, water inflow, etc.), on the premise of ensuring personal safety, please press the red "Emergency Stop" button of the charging station to stop the charging process.
- Automatic fault stop:** A fault stop initiated by the charging station.

The charging station is automatically protected in the event of the fault. The fault information and handling methods are as follows.

Fault information	Fault code	Handling method
All LED are not on	-	<ul style="list-style-type: none"> • Check if the station is connected to the power supply; • Check if the safety cutout has tripped, turn it on after clearing the fault; • Check the power cable connection and troubleshoot if found.
Red: Flash×1 Yellow: Flash×1	Fault code 11: CP voltage anomaly (Control Pilot voltage anomaly)	<ul style="list-style-type: none"> • Check the charging plug and the electric vehicle charging socket • Disconnect and reconnect the charging plug.
Red: Flash×1 Yellow: Flash×3	Fault code 13: Undervoltage	<ul style="list-style-type: none"> • Check the supply cable connection. • Check whether the input voltage is abnormal.
Red: Flash×1 Yellow: Flash×4	Fault code 14: Overvoltage	<ul style="list-style-type: none"> • Check the supply cable connection. • Check whether the input voltage is abnormal.
Red: Flash×1 Yellow: Flash×5	Fault code 15: Over-temperature protection	<ul style="list-style-type: none"> • Check whether the charging station is covered or installed in a high temperature environment.
Red: Flash×1 Yellow: Flash×7	Fault code 17: Protection from accidental contact or insulation fault	<ul style="list-style-type: none"> • Check the charging plug and charging cable for damage or moisture
Red: Flash×1 Yellow: Flash×8	Fault code 18: Reduced power	<ul style="list-style-type: none"> • Check the charging plug and charging cable for damage or moisture.
Red: Flash×1 Yellow: Flash×9	Fault code 19: Output overcurrent	<ul style="list-style-type: none"> • Check if the charging plug is properly connected. • Check if the On-Board Charger (OBC) of the electric vehicle is working properly
Red: Flash×2 Yellow: Flash×1	Fault code 21: Electric vehicle's response time is exceeded	<ul style="list-style-type: none"> • Battery of EV is full. Or the charging connector is not properly connected. • Disconnect and reconnect the charging plug.
Red: Flash×2 Yellow: Flash×2	Fault code 22: EV not supported	<ul style="list-style-type: none"> • This electric vehicle does not meet IEC standards and cannot be charged.
Red: Flash×2 Yellow: Flash×3	Fault code 23: Relay sticking	<ul style="list-style-type: none"> • The unit is damaged and needs to be repaired.
Red: Flash×2 Yellow: Flash×4	Fault code 24: RCD fault	<ul style="list-style-type: none"> • The unit is damaged and needs to be repaired.
Red: OFF Yellow: ON	Fault code 25: Ground fault	<ul style="list-style-type: none"> • Charging station is not grounded; input power cable needs to be checked.
Red: Flash×2 Yellow: Flash×6	Fault code 26: Ground leakage current	<ul style="list-style-type: none"> • The ground cable has leakage current, and the charging pile needs to be restarted

Make sure to maintain the equipment regularly according to the working environment to ensure its long-term and stable operation.

- a).** The electrical part of the equipment must be maintained only by properly trained and qualified personnel subject to the applicable standards and inspection schedules.
- b).** Check whether the equipment is well grounded and safe.
- c).** Check whether there are potential safety hazards around the charging pile, such as whether there are high temperature, corrosion or inflammable and explosive articles close to the charging station.
- d).** Check the station's power terminal contacts for overheating.

The international manufacturer warranty is 1 year. The warranty period starts from the date of purchase. In cases when warranty period is longer than 1 year according to local legislation please contact your local dealer. The Seller which sells the product is responsible for granting the warranty. Please contact the Seller for warranty. Within the warranty period, if the product fails because of defects in the production process, it will be exchanged on the same product or repaired.

All faults caused by the manufacturer during the warranty period will be eliminated free of charge. Warranty repair is carried out only if you have a fully completed warranty card, the Buyer's signature of acceptance of the warranty terms, as well as a document supporting the purchase (cash receipt, sales slip or invoice). In the absence thereof, as well as in the event of errors or corrections not authenticated by the seller's seal or illegible inscriptions in the warranty card or tear-off coupon, no warranty repair is carried out, no objections to quality are accepted and the warranty card is withdrawn by the service center as invalid. The device is accepted for repair clean and full.



EC Declaration of Conformity

Nr. 146

The following products have been tested by us with the listed standards and found in compliance with listed below directives and standards.

Manufacturer: DIMAX INTERNATIONAL GmbH
 Address: Flinger Broich 203, 40235 Duesseldorf, Germany
 Product: Charging station for electric vehicle "Können & Söhnen"
 Type / Model: KS P32/1, KS P16/3, KS P32/3

The statement is based on a single evaluation of above mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo. The manufacturer should ensure that all product in series production are in conformity with the product sample detailed in this report. The applicant should hold the whole technical report at disposal of the competent all the right.

Applied EC Directives: DIRECTIVE 2014/53/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 16 APRIL 2014 ON THE HARMONISATION OF THE LAWS OF THE MEMBER STATES RELATING TO THE MAKING AVAILABLE ON THE MARKET OF RADIO EQUIPMENT Directive 2011/65/EU (RoHS) as last amended by Directive (EU) 2015/863 EC Regulation №1907/2006 - Registration, Evaluation, Authorisation and restriction of Chemicals (REACH)

Requirement	Standard
Health and Safety (Article 3.1a)	EN IEC 61851-1:2019, EN 62311:2020, EN 50364: 2018, EN 50665:2017
EMC (Article 3.1b)	EN 301 489-1 V2.2.3, EN 301 489-3 V2.1.1, EN 301 489-17 V3.2.4, EN IEC 61851-21-2:2021, EN IEC 61000-6-1:2019, EN IEC 61000-6-2:2019, EN IEC 61000-6-3:2021, EN IEC 61000-6-4:2019, IEC 61000-3-12:2011, EN 61000-3-12:2011, IEC 61000-3-11:2017, EN 61000-3-11:2000
Radio Aspects (Article 3.2)	EN 300 328 V2.2.2 EN 300 330 V2.1.1

Notification body , responsible for 2014/53/EU Directive certificate issuing for models KS P32/1, KS P16/3, KS P32/3 is LGAI Technological Center, S.A. (APPLUS), Campus UAB- Ronda de la Font del Carne s/n 08193 Bellaterra (Barcelona), T: +34 93 567 20 00, www.applus.com. Notification body number is 0370



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General director: Fomin P. *P. Fomin*

DIMAX
 International
 GmbH
 Steuer-Nr: 103 5722 2493
 USt-Id-Nr: DE29617274

We DIMAX INTERNATIONAL GmbH hereby declare that specified above conforms covering European Parliament and Council Directives -2014/53/EU of the European Parliament and of the council of 16 april 2014 on the harmonisation of the laws of the member states relating to the making available on the market of radio equipment Directive 2011/65/EU (RoHS) as last amended by Directive (EU) 2015/863. The CE mark above can be used under the responsibility of manufacturer. After completion of an EC declaration of Conformity and compliance with all relevant EC directives.

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