Stand 16.12.2024

WALLBOX24.de
DER E-PROFI...

Benutzerhandbuch

Ladegerät Duo Wallbox

3 Phasen 400V 2x22kW
2x32A 2xKabel Typ 2 V

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WALLBOX24.de
DER E-PROFI...

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Symbol meaning

symbol	meaning
	"Non-recyclable" mark: located on the product, instruction manual or package, indicating that electrical and electronic equipment and its accessories should be treated separately from ordinary household waste.When scrapped, it should be treated as industrial waste,otherwise it may cause accidents.
	Warning sign: indicates danger. Pay attention to the personal injury that may be caused by operation procedure or incorrect operation. Actions after the "warning" mark can only be performed when the conditions indicated by the condition are fully understood and satisfied.

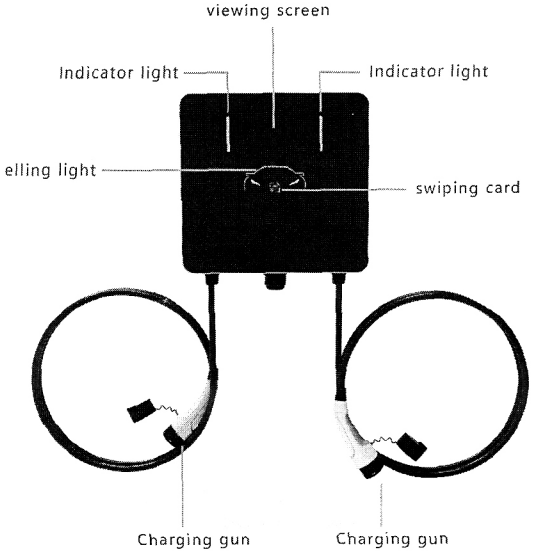
The company is committed to the continuous improvement and update of the product, product hardware and software will continue to upgrade, the information provided is subject to change without prior notice.

version: V2.0

Revision date: 2022-3

catalogue

Product overview



Appearance of charging pile

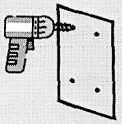
product function

1. With card swiping start, and equipped with charging IC card.
2. Reservation charging function, which can be charged regularly according to user needs, and it will automatically end when fully charged.
3. The historical record function can query the historical charging record and expense record.
4. Equipped with display screen to display SOC information in real time, Estimated fill time.
5. With overload protection, overvoltage protection, undervoltage protection, short circuit protection, overtemperature protection, emergency stop and other functions.
6. Convenient charging, plug and play.

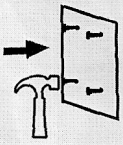
basic parameters

parameter	
Working voltage	AC400V(L1+L2+L3+N+PE)
Rated power	44kW
Frequency	50Hz
IP Degree	IP65
Use environment	
Working temperature	-30℃—+50℃
Working humidity	5%~95%HR
The cooling way	Natural air cooling
Display function	
Display parameters	Charge voltage, charge current, charge quantity, SOC, fault code.
Physical size	
Fuselage size	355*250*93mm
Installation mode	Column mounted (floor mounted) or wall mounted Install optional

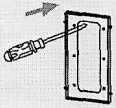
Installation steps



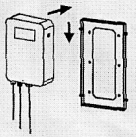
1. Drill holes using the drilling template



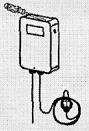
2. Hammer the M6.0 expansion tube intothe wall hole



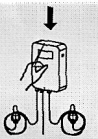
3. Use the screwdriver to fix the M6.0 self tapping screwsto the backplane on the wall



4. Install the charging pile on the backplane on the wall



5.Lock the anti-theft screw on the top of the charging pile, and place the plug seat in an appropriate place



6. After completing the above steps, the surface protective film of the charging pile can be torn off

Installation Instructions

Specification for electrical box at input:

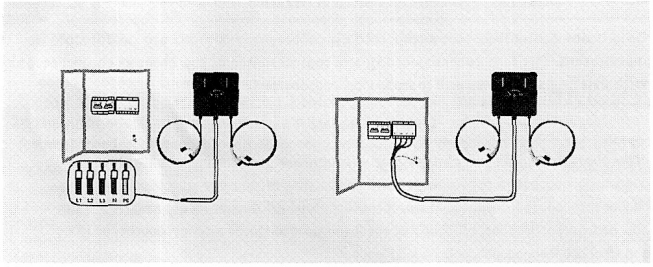
· The power distribution box at the input end of each AC charging pile shall beequippedwith leakage air switch with rated current no less than 40A.

· Select an adaptive molded case circuit breaker according to the current of the ac charging pile (32A required for a single ac pile).

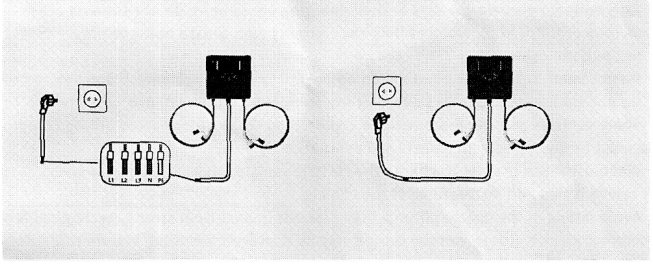
· Power cables for ac charging piles (cables between air breakers and ac piles) must meet the rated capacity of at least 32 a. single-phase power is recommended. The recommended voltage range is AC400V .

·50Hz power supply, make use of 6mm² copper core cable; When installing acchargingpiles, ensure that the PE cables are properly grounded.

Wire Connection Instructions



If the power distribution box is connected, connect the L1,L2,L3, N, and PE ends of the input linethe L1,L2,L3, N, and PE ends of the circuit breaker respectively.



If the joint is connected, the heat shrinkable waterproof joint should be used to connect both ends.Notice that L1,L2,L3, N, PE correspond,Squeeze the joint with crimping pliers to ensure good contact.

Important information

Electrical hazard
Only trained, qualified and authorized electrical professionals are responsible for installation. The first commissioning and maintenance of the charger should comply with existing standards and installation regulations.
Electrical Hazard/Fire Hazard
• The charger's socket or charging gun (including the charging cable) must be regularly inspected for damage, and the casing must be inspected for damage. • If the charger is damaged, it must be switched off immediately and replaced • Do not perform charger repair or replacement without authorization, only by the manufacturer. • Do not modify or modify the charger without authorization. • Do not remove safety symbols, warning tips, nameplates, signs or pipeline marks. • When installing for the first time, disconnect the power supply before connecting the external power supply to the charger input. Do not connect the line with live power. • No extension cable shall be used when connecting the electric vehicle to the electric vehicle power supply unit. • Only connect electric vehicles or their charging equipment, do not connect other loads (power tools, etc.). When pulling the charging gun, please hold the plug, do not pull the cable. • Do not bend, squeeze or bend the charging gun to cause mechanical damage. • Do not contact the contact surface of the equipment with heat, dirt, or water. • Some vehicles may generate toxic or explosive gases in indoor areas during charging and must be equipped with an external ventilation system. • When using the charger to charge the electric vehicle, please carefully read the relevant tips and instructions of the vehicle. • Avoid falling of the charger from a high place or impact from strong mechanical force; otherwise, electrical safety of the device may be damaged, resulting in potential safety hazards. • It is strictly prohibited to use in the environment with combustible material or explosive gas, otherwise there is the risk of explosion. • Do not let conductive objects such as metal foreign matter fall into the charger, otherwise accidents may occur. • The PE end of the charger must be grounded reliably; otherwise, electric shock or fire may occur.

Troubleshooting

The fault name	Symptom Possible causes
AC overvoltage	AC input voltage too high
Rule out advice	
1. If the voltage exceeds 265Vac for a short time, wait for the power grid to restore itself to the normal voltage range. 2. Check the background monitoring data and analyze. If the voltage in this area is overvoltage for a long time, adjust the input overvoltage protection point to 265Vac by configuring software.	
The fault name	Symptom Possible causes
AC undervoltage	AC input voltage too low
Rule out advice	
Check the background monitoring data and analyze. If the voltage in this area is chronically undervoltage (175Vac), the protection point of input undervoltage can be adjusted to 90 Vac at least by configuring software.	
The fault name	Symptom Possible causes
AC overcurrent	Excessive AC input current
Rule out advice	
1. Immediately turn off the leakage/overcurrent protection circuit breaker of the power distribution box. 2. Check whether there is low impedance or short circuit between the output line of AC pile. 3. After the fault is rectified, power on the device again. If the fault persists	
The fault name	Symptom Possible causes
Overtemperature	The temperature in the AC pile is too high
Rule out advice	
Check the ac pile installation environment. Check whether there are other heating devices nearby. Ensure that the ambient temperature is below 50 ° C.	

The fault name	Symptom Possible causes
Leakage current exceeds standard	High leakage current to the ground
Rule out advice	
1. 1. Immediately turn off the leakage/overcurrent protection switches in the power distribution box. 2. Check whether the output line of AC pile is damaged or has low impedance to the ground 3. After the fault is rectified, power on the device again. If the fault persists, contact us.	
The fault name	Symptom Possible causes
Ground fault	The input/output is improperly grounded or the input L/N is inversely connected
Rule out advice	
1. Immediately turn off the leakage/overcurrent protection switches in the power distribution box 2. Check whether the input and output cables of ac piles are grounded properly and whether the input L/N cables are connected in normal sequence. 3. After the fault is rectified, power on the device again. If the fault persists, contact us.	
The fault name	Symptom Possible causes
Abnormal communication(Internet mode)	Poor background communication of AC pile
Rule out advice	
1. Check whether the network cable is properly connected. 2. Check whether charging piles are correctly configured in the background.	
The fault name	Symptom Possible causes
Abnormal connection of charging gun	Charging gun CC/CP Connection exception
Rule out advice	
1. Check whether the charging gun is connected correctly and reliably. 2. If the fault persists, contact us.	

Troubleshooting

Fault display:Over-temperature fault
Possible causes
1. The ambient temperature exceeds the working temperature specification 2. The input voltage of AC power supply is too high 3. Internal charger failure
terms of settlement
1. Install the charging pile in an environment with low ambient temperature. 2. If the problem cannot be solved, please do not use the charging pile. Please contact your local company representative or a qualified electrical contractor.
Fault display:Device overvoltage
Possible causes
1. The input voltage of AC power supply is too high 2. Internal charger failure
terms of settlement
1. Check the input voltage. 2. If the problem cannot be solved, please do not use the charging pile. Please contact Local company representative or qualified electrical contractor.
Fault display:Device undervoltage
Possible causes
1. The input voltage of the AC power supply is too low 2. Internal charger failure
terms of settlement
1. Check the input voltage. 2. If the problem cannot be solved, please do not use the charging pile. Please contact Local company representative or qualified electrical contractor.
Fault display:Meter unconnected!
Possible causes
1. Metering module failure terms of settlement Please contact your local company representative or a qualified electrical contractor

Fault display:Emergency fault
Possible causes
1. The emergency stop button is pressed 2. The emergency stop button is damaged
terms of settlement
1. Press the resume emergency stop button again 2. Replace the emergency stop button
Fault display:RFID unconnected
Possible causes
1. Card reader failure
terms of settlement
1. Whether the power supply is restored after restart 2. Replace the card reader
Fault display:Grounding fault
Possible causes
1. Ground fault
terms of settlement
1. Check whether the ground wire is reliably connected
Fault display:OverCurrent fault
Possible causes
1. Overload protection
terms of settlement
1. Please contact the manufacturer's local representative or a qualified electrical contractor

Fault indicator prompt

Working state	gules	green	blue
free	/	Stays On	/
Insert a gun	/	/	Flashing
recharge	/	/	Stays On
Metering communication error	Flash for 1	/	/
Under-voltage alarm	Flash for 2	/	/
Overvoltage alarm	Flash for 3	/	/
Ground fault	Flash for 4	/	/
Over current protection	Flash for 5	/	/
Permanent overcurrent protection	Flash for 6	/	/
Leakage protection	Flash for 7	/	/
Over temperature protection	Flash for 8	/	/
Emergency stop button	Flash for 9	/	/
RFID failure	Flash for 10	/	/
Relay failure	Flash for 11	/	/
Relay failure	Flash for 12	/	/
Memory failure	Flash for 13	/	/
Clock exception	Flash for 14	/	/

wait for
Indicator light: green, always on

Charging / charging completed
Indicator light: Blue (flashing / always on)

The fault
Indicator: blinking red

Maintain

The power distribution system

The AC input of the charger is led out from the distribution box of the power grid, and thepower shall be cut off before connection. The power on and power off steps are as follows:

1. Check whether the power supply voltage is normal.
2. Closing: first close the main switch of the distribution box, and then close the branch circuit switch in turn.
3. A switch: pull each branch circuit switch first, and then pull the main switch of the distribution box. Pull the main brake in case of emergency.

Line system

Regularly check the input and output cables of the charger:

1. Weekly line inspection: check the cable for heating and damage.
2. Monthly line inspection: check whether the cable is heated or damaged, whether the cable is stressed by external tension, and whether the cable is fixed firmly.
3. Annual routine inspection: check whether the connection between the cable and the switch is tight, whether the grounding is reliable, whether the cable is heated and damaged, whether the insulation resistance of the cable meets the requirements, whether the sealing measures of the cable charger are intact, and whether the holes are sealed tightly.

Circuit components

The following inspections shall be carried out by professional maintenance personnel:

1. Weekly routine inspection: whether the mechanical lock buckle of the charging gun is damaged and whether the connection is abnormal.
2. Quarterly routine inspection: whether there is ignition burning at the connection of charging gun wire core. If there is any abnormality, replace the parts in time.
3. Annual routine check: use brushes and vacuum cleaners to remove dust from the box. When cleaning, be careful to inhale dust into the components by mistake, resulting in short circuit. Check all components of the box and replace abnormal parts in time.

Equipment appearance

1. Check the appearance of the charger monthly to see if there are stains, and clean the charger shell.

Appendix

The reference standard

IEC 61851-1:2017 《Electric vehicle conductive charging system - Part 1: General requirements》

IEC 62196-2: 2016 《Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories》

EN 61851-1-2001 《Electric vehicle conductive charging system. General requirements》

EN 61851-21-2001 《Electric vehicle conductive charging system - Part 21-1: Electric vehicle on-board charger EMC requirements for conductive connection to an AC/DC supply》

EN 61851-22-2001 《Electric Vehicle Conductive Charging System Part 22: AC Electric Vehicle Charging Station》

IEC 61851-1:2017 《Electric vehicle conductive charging system - Part 1: General requirements》

IEC 62196-2: 2016 《Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories》