

Atlas\_UL AC Home Charger

# User maintenance Manual

EN







## Important Safety Instructions

Please read all instructions carefully before using this product.

This document describes the precautions to be paid attention to during the installation, operation, and maintenance of the product. Strictly follow the instructions in this document before installing and using the product.

-  **Warning:** Do not install or use wall-mounted connectors near flammable, explosive or combustible materials, chemicals or steam.
-  **Warning:** Before the equipment is powered on, make sure it is well grounded to avoid casualties caused by electric shock.
-  **Warning:** Before installing or cleaning Atlas Chargers, turn off the input power of Atlas Chargers.
-  **Warning:** Before powering on the device, ensure that the input voltage, frequency, and other conditions meet product requirements.
-  **Warning:** The Atlas Charger must be installed and used through a permanent wiring system or equipment lead.
-  **Warning:** Do not forcibly fold or press any part of the wall-mounted connector or damage it with a sharp object.
-  **Warning:** Do not spray water or other liquids directly into the Atlas Charger. Do not spray water on the charging handle or soak the charging handle in liquid. Do not spray water on the charging base. After charging, please put the charging handle into the protection seat to avoid unnecessary pollution or moisture.
-  **Warning:** Wall-mounted connectors must be installed by personnel trained and qualified to operate electrical systems.
-  **Warning:** If the wall-mounted connector is defective, cracked, worn, cracked or otherwise damaged, or does not work properly, do not use Atlas Charger and disconnect the input power in time.
-  **Warning:** It is strictly forbidden to remove the gun head in the charging process to ensure the safety of life and vehicles in the charging process.
-  **Warning:** If the soft power cord or EV cable is worn, broken or otherwise damaged, or cannot work normally, do not use Atlas Charger and disconnect the input power in time.
-  **Warning:** During the charging process, the vehicle is prohibited from driving and can only be charged when stationary. Please turn off the hybrid electric car before charging it.
-  **Warning:** Do not attempt to remove, repair, tamper with, or modify the wall-mounted connector. Wall-mounted connectors are not user-serviceable equipment. For any repairs or modifications, please contact the saler.
-  **Warning:** Do not insert fingers or foreign objects into any part of the wall-mounted connector.

# Safety features

## Residual current detection (RCD)

Atlas AC commercial Charger has integrated typeA 30mA + 6mA DC leakage protection residual current device (RCD) conforming to IEC standards, so there is no need to install RCD B type leakage protection circuit breaker outside unless the local grid require to.

The RCD leakage sensor automatically detects the balance state of alternating current between power supply wires. If the AC imbalance is detected, it indicates that the Charger has leakage. This indicates that current flows out of the GROUND cable PE or the Charger except the power supply cable, causing a shock hazard. If the leakage current is greater than or equal to 30mA, the Charger stops output and generates an alarm.

DC residual current detection and protection module automatically monitors dc leakage. When detecting that more than or equal to 6mA dc is flowing out of the ground cable PE or the Charger other than the power supply cable, the Charger stops output and generates an alarm.

If the RCD fault occurs, please disconnect the input power of Atlas Charger and remove the charging connector from the EV. Power it on again 5 minutes later. If the fault persists, please contact the electrician to check the power supply.

## Short-circuit protection of the charging cable

In case of short-circuit, the value of I2t at the EV socket-outlet of the Mode 3 Charger shall not exceed 75 000 A2s. In case of short-circuit, the value of I2t at the vehicle connector (Case C) of the Mode 3 Charger shall not exceed 80 000 A2s.

## Standards and certifications

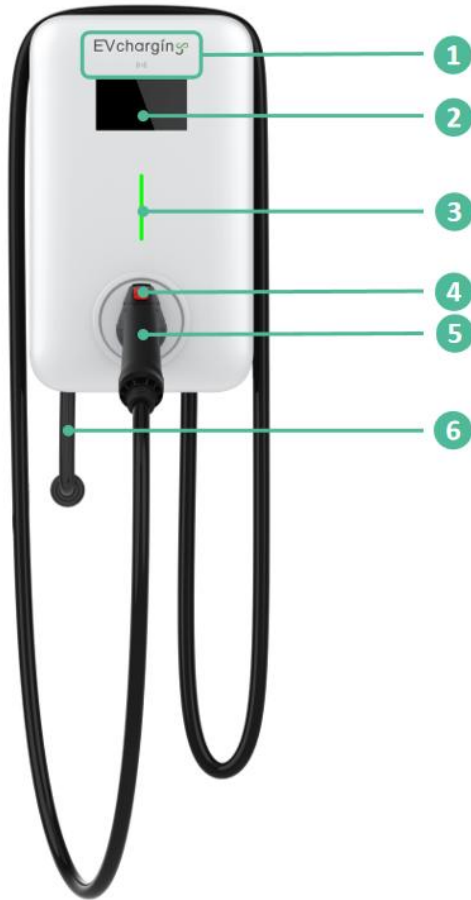
Electrical safety	EN 61851-1 EN 62955
Electromagnetic compatibility	EN 61851-21-2
Charging interface	EN 62196-1 EN 62196-2
Compatible with charging	EN 61851-1
Certification	CE RoHS

# Product specification

Model	A7-OP-UL-SH	A7-OP-UL-SP	A9-OP-UL-SH	A9-OP-UL-SP	A11-OP-UL-SH	A11-OP-UL-SP
Voltage Range	120/208/240 VAC	120/208/240 VAC	120/208/240 VAC	120/208/240 VAC	120/208/240 VAC	120/208/240 VAC
Rated Current	32A	32A	40A	40A	48A	48A
Frequency	60Hz	60Hz	60Hz	60Hz	60Hz	60Hz
Rated Power	7.7kw@240V	7.7kw@240V	9.6kw@240V	9.6kw@240V	11.5kw@240V	11.5kw@240V
Wire	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
Incoming line mode	Hardwired	plugs	Hardwired	plugs	Hardwired	plugs
Wire	L1 - L2/N - PE					
The distribution system	TT,TN,IT					
Connector	SAE J1772 (Type 1)					
Operating Temperature	-30°C to 50°C					
Humidity	5 to 95% humidity					
Altitude	≤2000m					
Residual Current Detection	20mA CCID					
Enclosure Material	PC-XD2322(f1)					
Type of enclosure	Type 4					
Weight	≤10kg					
Product Dimensions	Height: 395 mm (15.6 in) Width: 235 mm (9.3 in) Depth: 110 mm(4.3 in)					
Charging Cable Length (cable version)	7m (23ft) standard, 5m (16ft) optional					
Ventilation	Don't need					
communication interface	WiFi+Bluetooth (Standard) ETH+4G (Option)					
Wi-Fi	2412 to 2462MHz					
Bluetooth	2402 to 2480MHz					
Northbound agreement	OCPP 1.6J					
Charging mode	RFID&APP					
Safety Protection	Overcurrent, overvoltage, undervoltage, over temperature, sticking relay, ground continuity monitoring, household power use protection, residual current protection, integrated surge protection					

# Components & Features

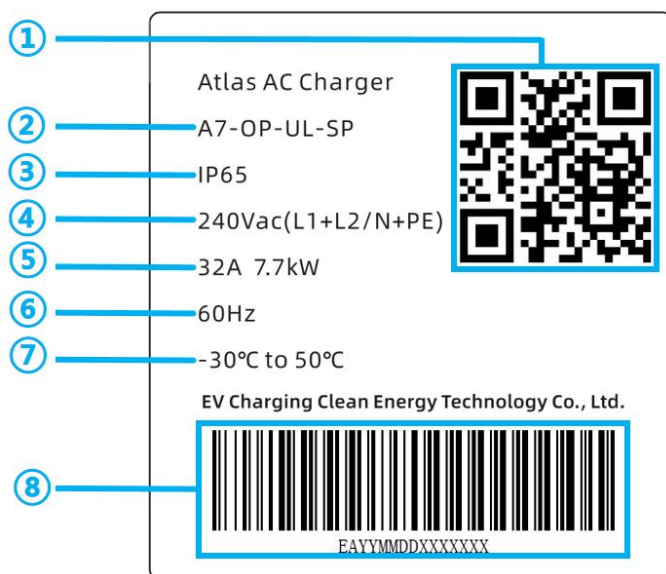
## Product Enclosure



- ① **Sweep card area:** The integrated RFID reader allow charging cards scanned. Atlas will read the information on your card to determine whether it is allowed to start or stop charging.
- ② **Screen:** Display charging status and charging data.
- ③ **LED indicator:** Light in different colors and display mode to reflect the real-time status of the Charger. Read more about its color in chapter 'LED Indicator Status'.
- ④ **Connector button:** press to unlock the connector.
- ⑤ **Charging connector:** The cable can directly connect between the Charger and the electric vehicle, insert the charging gun into the vehicle, after finished charging, please insert the charging gun back into the charging seat.
- ⑥ **Input line of Charger:** Alternating current is fed into the Charger.

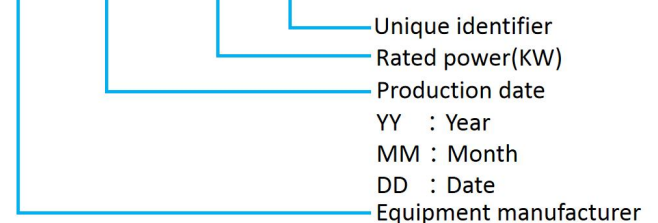
## Label Information

There is a label on the right side of each Charger with unique information of the product.



- ① QR code: Embedded with unique serial number of the Charger, supports scanning to binding and charging.
- ② Model name
- ③ IP Rating
- ④ Rated voltage
- ⑤ Rated current
- ⑥ Frequency
- ⑦ Operating temperature range
- ⑧ The serial number: Contain information about the available power rating and production date, can refer to the following instructions.

EAYYMMDDXXXXXX



# Device Maintenance

Maintenance of the charger must be performed only by qualified personnel per the applicable local regulations. Unauthorized installation and modifications make the manufacturer warranty void.

## 1 General maintenance

If the product is installed in public spaces and is accessible to everyone, suggest follow the procedures below.













1. Ensure that the charger does not have any signs of mechanical damage.
2. Visually inspect the Type 2 socket for wear and tear at regular intervals according to local regulations. If the pins are discoloured or damaged, please contact your authorised electrician.

## 2 Cleaning

The product does not require cleaning to operate properly. Nevertheless, if the product needs to be cleaned for cosmetic reasons, this is possible.

1. Use a damp cloth and an all-purpose household cleaner. Avoid using strong chemicals that contain oil or alcohol, as this will discolour the plastic.
2. Do not use running water or high pressure water jets.

# Status Indicator Light

Green breathing lamp Online Idle	Green all bright Online prepare	Purple breathing lamp Offline Idle	Purple all bright Offline prepare	Yellow all breathing reserved
				
Yellow breathing lamp Charging suspension	Green flashing End of charging	Red flashing Error	Red all bright Disable	White water lamp Upgrading
				
<p>Green water lamp In the Charging The higher the charging current, the faster the rhythm of the status indicator</p>		<p>If the temperature of the charging pile is too high, the derating charging will turn into a purple water lamp</p>		

# Fault Description

Fault (Fault code)	Cause Analysis	Processing Method
AC input overvoltage (0x020b0000)	<ol style="list-style-type: none"> <li>1. Local power grid voltage does not meet the input voltage range of the product;</li> <li>2. The local voltage power grid voltage is unstable, and the voltage fluctuates beyond the product input voltage range;</li> <li>3. Damage to the charging pile leads to abnormal sampling;</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure that the input voltage is within the specified range;</li> <li>2. Measure the input voltage and confirm that the voltage is within the specified range;</li> <li>3. If the charging pile leads to abnormal sampling, please contact the local dealer;</li> </ol>
AC input undervoltage (0x020c0000)	<ol style="list-style-type: none"> <li>1. Local power grid voltage does not meet the input voltage range of the product;</li> <li>2. The local voltage power grid voltage is unstable, and the voltage fluctuates beyond the product input voltage range;</li> <li>3. Damage to the charging pile leads to abnormal sampling;</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure that the input voltage is within the specified range;</li> <li>2. Measure the input voltage and confirm that the voltage is within the specified range;</li> <li>3. If the charging pile is damaged and causes abnormal sampling, please contact the local dealer;</li> </ol>
grounding malfunction (0x10010300)	<ol style="list-style-type: none"> <li>1. The ground wire of the device input end is not connected;</li> <li>2. Power supply is not good, and the zero ground voltage is too high;</li> </ol>	<ol style="list-style-type: none"> <li>1. Check whether the ground wire connection of the equipment input end is good;</li> <li>2. Use the multimeter to measure the voltage between the N line and the PE line, and the voltage between the normal N line and the PE line does not exceed 2V;</li> </ol>
malfunction of leakage current (0x02A60000)	<ol style="list-style-type: none"> <li>1. Leakage fault of charging pile (30mA AC or 6mA DC); There is a current flowing from the unconventional path to the earth;</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn off the equipment input power supply in time to prevent electric shock;</li> <li>2. Check whether the equipment output cable and gun head are damaged; If damaged, please contact the local dealer to replace the charging gun;</li> <li>3. Check whether the equipment gun head interface and electric vehicle interface are wet and have foreign matter, and keep the charging interface dry and clean; If the leakage fault is still reported, turn off the input power supply and contact the local dealer;</li> </ol>
malfunction of card swipe machine (0x030f0000)	<ol style="list-style-type: none"> <li>1. The card reader cable is loose;</li> <li>2. The card reader is damaged;</li> </ol>	<ol style="list-style-type: none"> <li>1. The charging pile is powered on again;</li> <li>2. Please contact the local dealer for handling;</li> </ol>
unwanted/refuse operation of AC input contactor	<ol style="list-style-type: none"> <li>1. The device charging control panel (charging control unit) is abnormally damaged;</li> </ol>	<ol style="list-style-type: none"> <li>1. Please contact the local dealer for handling;</li> </ol>



(0x02030000)		
sticking of AC input contactor (0x02040000)	1. The device charging control panel (charging control unit) is abnormally damaged;	1. Turn off the equipment input power supply in time; The input power supply is not disconnected, the charging gun is charged, and there is a risk of electric shock; 2. Please contact the local dealer for handling;
malfunction of control pilot during charging (0x02050000)	1. PP \ CP \ PE is damp, with foreign body resulting in abnormal connection signal; 2. The device charging control panel (charging control unit) is abnormally damaged;	1. In the case of power failure, check the gun head and socket of the equipment and electric vehicle, clean up the foreign body on the plug and socket, and keep the gun head and interface dry and clean; 2. Please contact the local dealer for handling;
malfunction of electronic lock of charging interface (0x02110000)	1. The charging gun is not plugged in in place; 2. The electronic lock of the charging gun holder is damaged;	1. Reinsert the gun and insert the charging gun into the charging socket; 2. Please contact the local dealer for handling;
overheating of charging interface (0x02100000)	1. The temperature inside the charging pile is too high;	1. Ensure that the charging pile is used within the specified ambient temperature; If the ambient temperature is too high, the charging pile will automatically reduce the output current and set the fault to stop charging; 2. Strengthen the ventilation and heat dissipation of the location of the equipment;
overcurrent of AC output (0x02A40000)	1. The side overload of the electric vehicle does not respond to the current limit signal of the charging pile; 2. The charging gun is not fully inserted in place, resulting in the abnormal communication between the charging pile and the electric vehicles;	1. Replace the electric vehicle for charging to check whether the AC output overload fault will still occur; Or charge the electric vehicle with another charging pile, and if the current fault is still reported, you need to contact the electric vehicle dealer; 2. Check the connection of the ev charging cable to ensure a good connection;
leakage component malfunction (0x02AA0000)	1. The electric leakage sensor is accidentally triggered; 2. The leakage sensor is damaged; 3. The communication line of the leakage sensor is loose;	1. If the equipment is cut off, power on again after 5 minutes to check whether the fault is restored; 2. Power failure cannot be restored, contact the local dealer;
communication	1. The WIFI Bluetooth module is	1. If the equipment is cut off, power on again

malfunction of WIFI-bluetooth module (0x031C0000)	interrupted by interference communication; 2. The WIFI Bluetooth module is damaged;	after 5 minutes to check whether the fault is restored; 2. Power failure cannot be restored, contact the local dealer;
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Please feel free to contact us if you have any problem with the charging station .

You can also get the detailed product manual through our official website.

We'd love to hear from you, please reach out to us at

<http://www.evchargingplus.com>.