MaxiCharger AC Wallbox

Installation and Operation Manual

Version 3.5

CE Model

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CONTENTS

1 Using This Manual 1

1.1 Conventions 1
1.2 Revision History 2

2 Safety 4

2.1 Safety Warnings 5
2.2 Disposal Instructions 7

3 General Introduction 8

3.1 Product Overview 9
3.2 Options 13
3.3 Display Description 16
3.4 Wiring Diagram for MCB, RCD, and Emergency Stop 23
3.5 Product Model 24
3.6 In the Box 26
3.7 Recommended Tools 27

4 Installation 28

4.1 Unpacking 28
4.2 Preparation 29
4.3 Mechanical Installation 29
4.4 Power Supply Wiring 31
4.5 Internet Connection 35
4.6 Finish Installation 37
4.7 Protective Device 39

5 Operation 41

5.1 Energizing the Charging Station 41
5.2 Start Charging 42
5.3 Stop Charging 44

6 Troubleshooting and Service 47

6.1 Troubleshooting Table 47
6.2 Service 52

7 Specifications 53

7.1 Cable Specifications 57
7.2 Supplementary Specifications 58
7.3 Product Dimensions 61

8 Compliance 62

9 Appendix 63

9.1 Fault Code List 63

1 Using This Manual

This manual describes the installation and use of the MaxiCharger AC Wallbox. Prior to installation, read through this manual to be familiarized with the instructions of this MaxiCharger to ensure a successful installation and smooth operations.

1.1 Conventions

The following conventions are used:

BOLD TEXT

Bold text is used to highlight selectable items such as buttons and menu options.

NOTE

A NOTE provides helpful information such as additional explanations, tips, and comments.

IMPORTANT

IMPORTANT indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

ILLUSTRATION

Illustrations used in this manual are only examples; the actual product(s) or screens may vary.

1.2 Revision History

Version	Date	Descriptions
V1	2022.05	Initial version
V2	2022.10	Merged user manual and installation manual
V2.1	2023.02	Complete manual overhaul
V3	2023.07	Updated display descriptions and overall layout
V3.1	2023.09	Updated compliance information
V3.2	2024.03	Updated safety information
V3.3	2024.05	Updated 7.2 Supplementary Specifications
V3.4	2024.06	Deleted the AC input cable that comes with the unit

V3.5	2024.09	Added the way to obtain the production date of the charger in 3.1 Updated the content of NOTE in 3.2 Updated Technical Specifications in Chapter 7 and 7.2 Supplementary Specifications

2 Safety

Safety messages are provided to help prevent personal injury and equipment damage. All safety messages are introduced by a single word indicating the hazard level.

DANGER

Indicates an imminently hazardous situation with a high risk level which, if the danger is not avoided, will cause death or serious injury.

WARNING

Indicates a potentially hazardous situation with moderate risk level which, if the warning is not obeyed, can cause death or serious injury.

CAUTION

Indicates a potentially hazardous situation with a medium risk level which, if the caution is not obeyed, may cause minor or moderate injury or damage to the equipment.

2.1 Safety Warnings

The safety messages herein cover situations Autel is aware of. Autel cannot know, evaluate or advise you as to all of the possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.

- Read and follow all warnings and instructions before installing and operating the MaxiCharger.
- Only a qualified electrician is allowed to install, service, repair, and relocate the MaxiCharger.
- The user must not attempt to service or repair the MaxiCharger as it does not contain user-serviceable parts.
- Switch off input power before installing the MaxiCharger. Keep the power off until it is fully installed and secure.
- Do not use explosive or readily flammable substances near the MaxiCharger.
- Do not use the MaxiCharger if the charging cable is frayed, broken or otherwise damaged, or fails to operate.
- Do not use the MaxiCharger if the enclosure or the EV connector is frayed, broken or otherwise damaged, or fails to operate.
- In the event of danger and/or an accident, a qualified electrician must immediately disconnect the electrical supply from the MaxiCharger.
- Refer to the vehicle user manual to check if the vehicle releases hazardous or explosive gases when charging.

- Follow the instructions given in the vehicle user manual before choosing the charging location of the MaxiCharger.
- Do not direct powerful water jets toward the MaxiCharger.
- Do not operate the MaxiCharger with wet hands.
- Do not put the charging handle into any liquid.
- Do not install or open the MaxiCharger in wet environment (such as rain or heavy fog).
- Ensure that the charging cable is positioned so that it will not be stepped on, tripped over, driven over or otherwise subjected to excessive force or damage. Where applicable, ensure that the charging cable is correctly stowed when not in use and that the charging handle does not touch the ground.
- Keep the charging handle away from heat sources, dirt or water.
- Use this MaxiCharger to charge compatible electric vehicles only. Refer to the technical specifications in this manual. Refer to the vehicle manual to check if the vehicle is compatible.
- Only use the MaxiCharger under the specified operating conditions in this manual.
- Local regulations may be applicable and may vary depending on your region/country of use. The qualified electrician must always ensure that the MaxiCharger is installed in accordance with the local regulations.
- Ensure that the charging cable is not damaged or tangled prior to use.
- Do not insert fingers into the charging port.

- Do not leave objects inside the charging port.
- Use of the MaxiCharger may affect or impair the operation of any medical or implantable electronic devices, such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator. Check with your electronic device manufacturer concerning the effects that charging may have on such electronic devices before using the MaxiCharger.
- Adaptors or conversion adapters are not allowed to be used. Cord extension sets are not allowed to be used.

2.2 Disposal Instructions

Handling waste incorrectly can have a negative effect on the environment and human health due to potential hazardous substances. Discard the charging station correctly can facilitate the reuse and recycling the materials and environmental protection.

- Obey the local rules when discarding parts, packaging materials or the charging station.
- Discard electrical and electronic equipment separately in compliance with the WEEE-2012/19/EU Directive on waste of electrical and electronic equipment.
- Do not mix or dispose the charging station with the household waste.

3 General Introduction

The MaxiCharger AC Wallbox is designed to charge an electric vehicle (hereinafter called EV). Our charging stations provide you with safe, reliable, fast, and smart charging solutions.

This manual will instruct you how to install and use this charging station.

Intended Use

This MaxiCharger is intended for the AC charging of EVs. It is intended for both indoor and outdoor use.

- Residential
- Commercial
- Workplace
- Vehicle Workshop

DANGER

- If you use the charging station in any way other than described in this manual or other related documents, possible death, injury and damage to property can occur.
- Use the charger only as intended.

NOTE

This manual is for cable, socket, and shutter models. The illustrations in this manual use the socket version as an example.

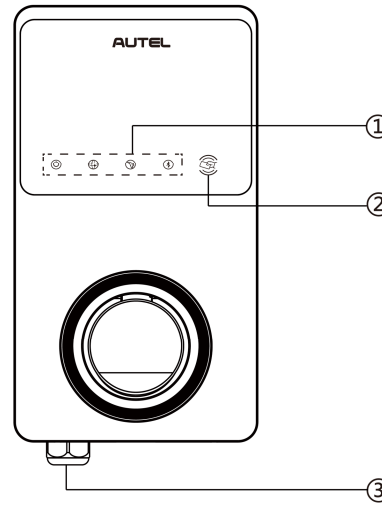
3.1 Product Overview

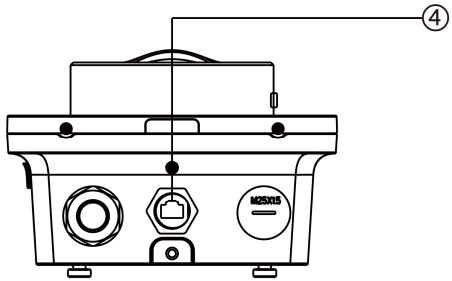
1. LED Indicators (from left to right):

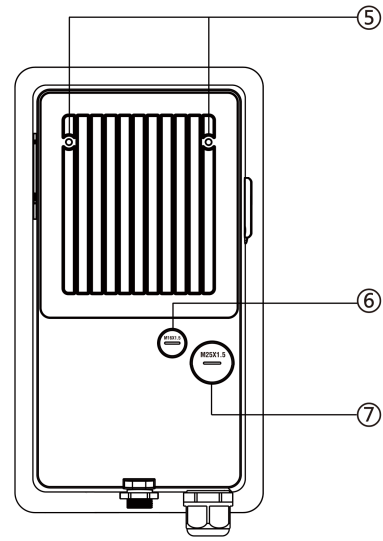
- Power LED
- Internet Connection LED
- Charging LED
- Bluetooth Connection LED

2. RFID Reader

3. AC Inlet Hole







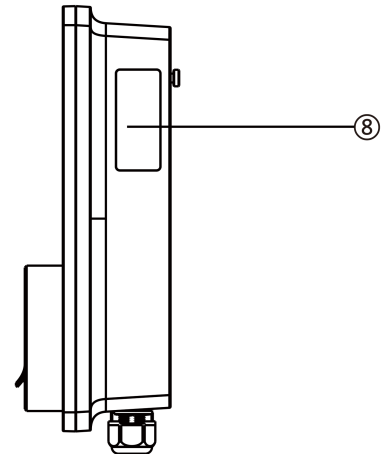
4. RJ45 Ethernet Port

5. Mounting Screws

6. Rear Entry Signal Conduit Plug

7. Rear Entry Power Conduit Plug

8. Product Label



LED Description

LED	Description
Power LED	**Solid Green:** The charging station is on. **Off:** The charging station is off. **Flashing Yellow:** Data is being transmitted and/or firmware is upgrading. **Solid Yellow:** Firmware upgrade has failed. **Solid Blue:** Data transmission has failed; will turn solid green in five seconds.
Internet Connection LED	**Solid Green:** The charging station is connected to the Internet. **Off:** The charging station is not connected to the Internet. **Flashing Green:** The charging station has joined the DLB (Dynamic Load Balancing) network.
Charging LED	**Solid Blue:** An EV is connected. **Flashing Blue:** A schedule is active. **Flashing Cyan:** The charging station is reserved. **Flashing Green:** An EV is charging. **Solid Yellow:** A recoverable error has occurred or it is temporarily disabled by the server. **Solid Green:** A charge session has ended. **Off:** No EV connected. **Solid Red:** An irrecoverable error has occurred. (Please contact support.)
Bluetooth Connection LED	**Flashing Green:** The charging station is connected to a mobile device via Bluetooth. **Off:** The charging station is not connected via Bluetooth.

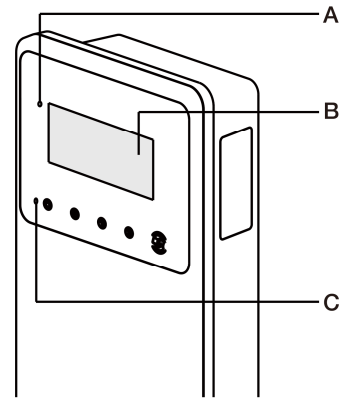
Obtaining the Production Date of the Charger

The production date of the charger can be obtained through the serial number on the product label.

Date	Character	Description
Year	The 10th character of the serial number	N: 2022 P: 2023 R: 2024 S: 2025 T: 2026 …
Month	The 11th character of the serial number	1: January 2: February 3: March 4: April 5: May 6: June 7: July 8: August 9: September A: October B: November C: December

3.2 Options

Display



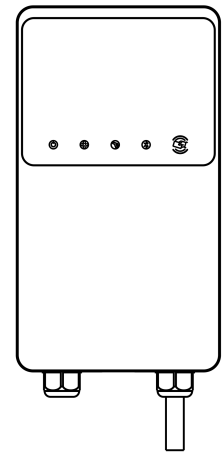
A. Ambient Light Sensor — Detects ambient brightness

B. Display

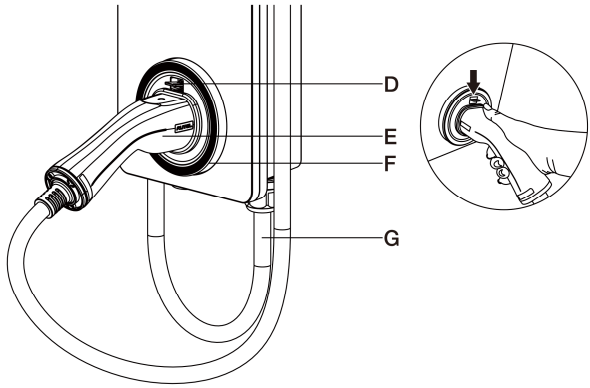
C. Energy Pulse Output (Infrared Ray)

Cable Model

Without Holster



With Holster



D. Charging Handle Safety Lock — **Press to release charging handle from its cradle**

E. Charging Handle, Type 2

F. Cradle

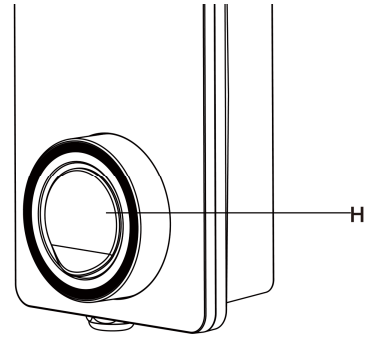
G. EV Charging Cable

NOTE

- Drape the EV charging cable over the top of the MaxiCharger and dock the charging handle in its cradle when not in use. See the illustration above.
- The maximum length of the EV charging cable is 7.5 meters.
- **Do Not** use adapter or transition adapter.
- **Do Not** use extension cords.

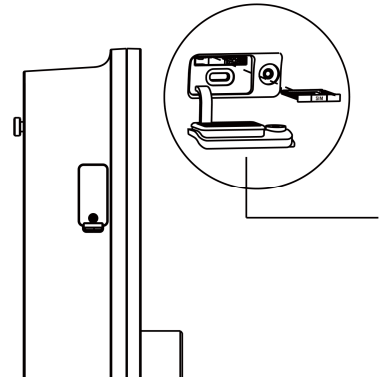
Socket/Shutter Model

H. Socket/Shutter, Type 2



SIM Card Socket

I. SIM Card Socket (Available on charging stations supporting cellular network function.)



3.3 Display Description

IMPORTANT

This section is only applicable to charging stations with a display.

Function Buttons

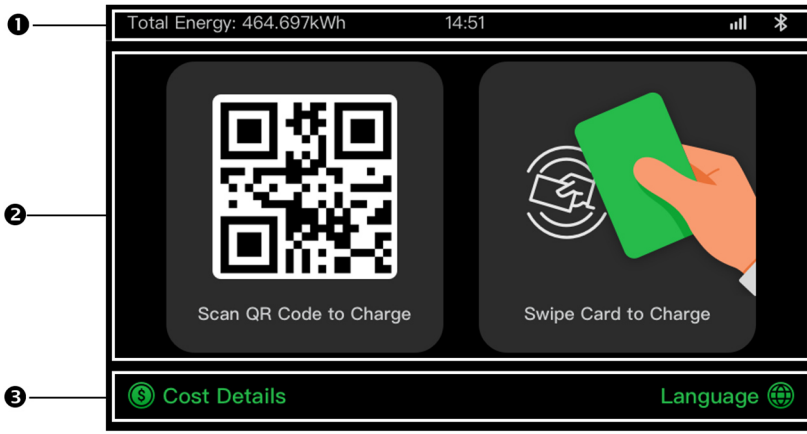
Button	Description
Cost Details	Tap to view the charging cost.
Language	Tap to choose your language for the charging station.
Stop	Tap to stop a charge session.
OK	Tap to confirm the information on the screen.
Back	Tap to return to the previous screen.

3.3.1 Boot Screen

The display shows the Boot screen while the charging station starting up.



3.3.2 Standby/Authorization Screen



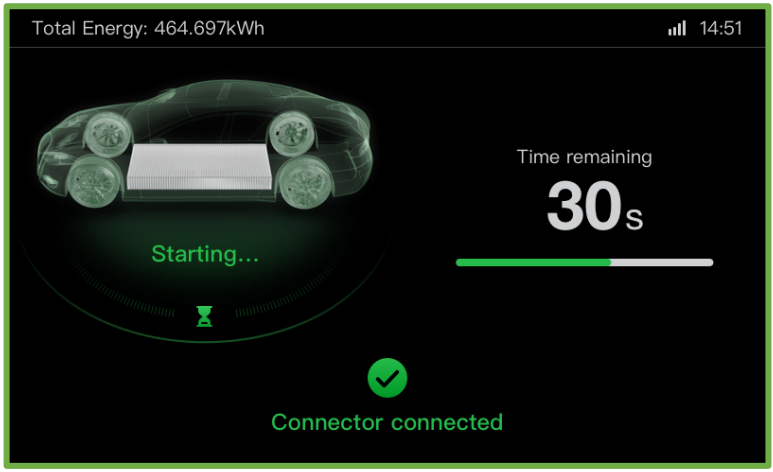
1. Top — displays total delivered energy, time, signal strength, and Bluetooth connection

2. Middle — provides two authorization methods: QR code or RFID card

3. Bottom — tap to view the charging costs and adjust the language

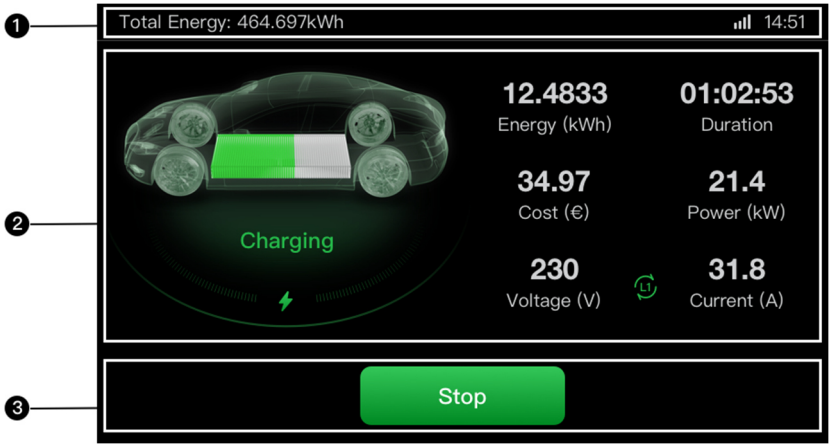
The display shows the Standby/Authorization screen when the charger is in idle status, indicating that the charging station is ready for use. When this screen appears, choose an authorization method (QR code or RFID card) to start a charge session.

3.3.3 Preparing to Charge Screen



3.3.4 Charging Screen

The Charging screen appears during the charge session.



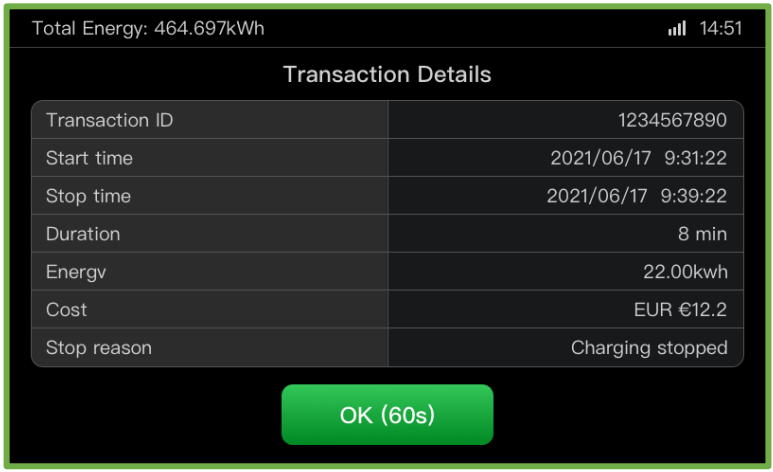
1. Top screen

2. Main Charging screen — shows the real-time charging progress and other charging information including energy, duration, current cost, power, voltage, as well as current per phase.

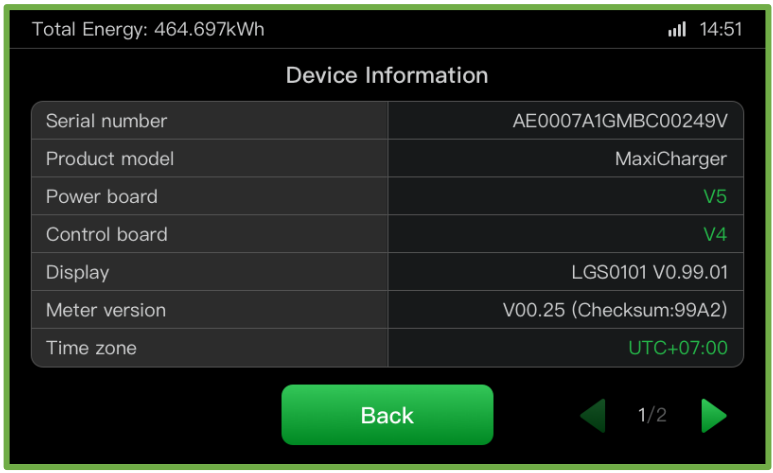
3. Stop button — tap to stop the charge session

3.3.5 Transaction Details Screen

When the charge session ends, the Transaction Details screen will appear. Tap the **OK** button to confirm your transaction details.



3.3.6 Device Information Screen

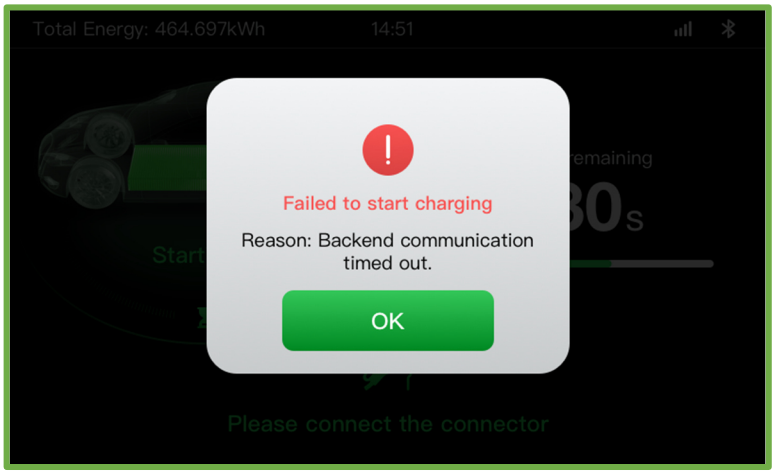


The actual Device Information screen may differ.

3.3.7 Error Information Screen

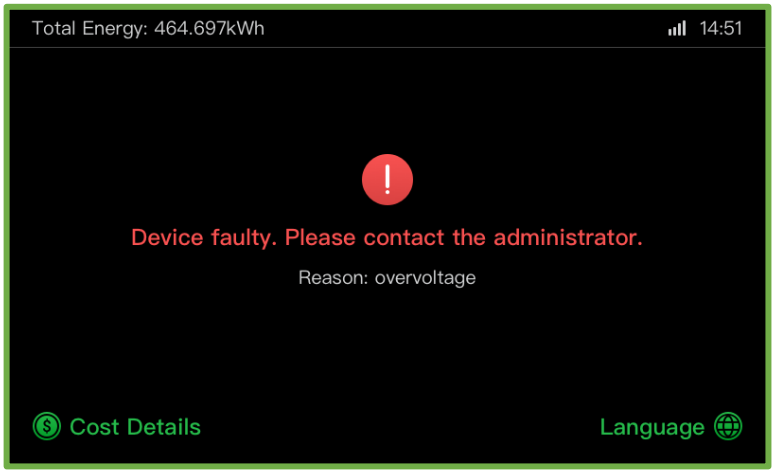
The display shows different error messages depending on the error type.

The charging station fails to start a charge session:



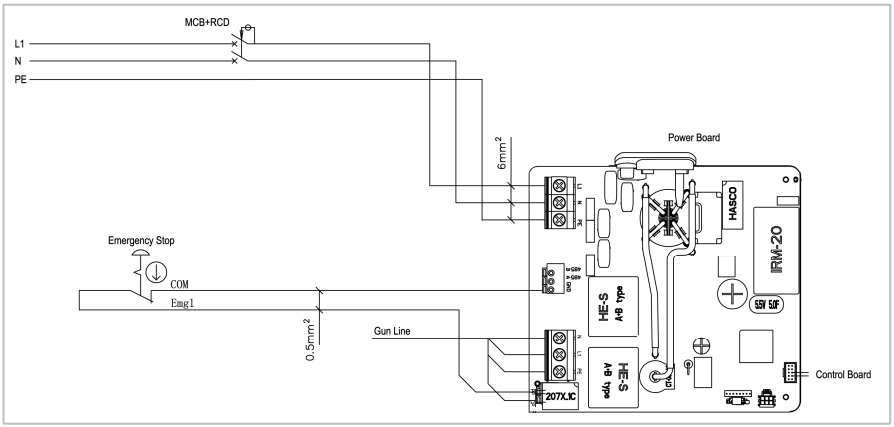
Tap the **OK** button to confirm the message.

An error has occurred with the charging station. Contact Autel support.

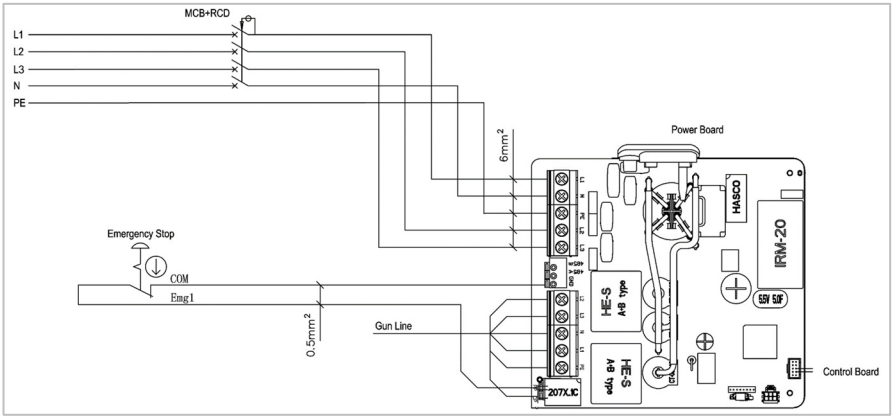


3.4 Wiring Diagram for MCB, RCD, and Emergency Stop

For 7.4 kW model:



For 11/22 kW Model:



3.5 Product Model

The MaxiCharger AC Wallbox model is a code that consists of seven parts:

Maxi U W - XX - YY - L - M - ZZ

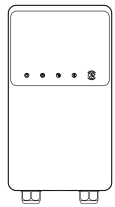
Code Part	Description	Value	Meaning of Value
U	Basic model designation	EU AC	EU AC series
		EU1 AC	EU1 AC series
W	Power	W7	7.4 kW
		W11	11 kW
		W22	22 kW
XX	Vehicle connection method	BC3	Vehicle connector with 3-meter cable without holder
		BC5	Vehicle connector with 5-meter cable without holder
		BC7	Vehicle connector with 7.5-meter cable without holder
		C3	Vehicle connector with 3-meter cable

		C5	Vehicle connector with 5-meter cable
		C7	Vehicle connector with 7.5-meter cable
		S	Socket-outlet (Not for 11kW models)
		H	Shutter-outlet (Not for 11kW models)
YY	Wireless function	4G	4G function embedded
		Blank	Standard type
L	LCD panel function	N/A	N/A
M	MID function	N/A	N/A
ZZ	Color	DG	Dark grey
		WH	White
		RG	Rose gold
		SV	Silver
		B	Black

3.6 In the Box

Charging Station

1 PC



Wall Dock

1 PC



Screw
(M6 x 50)

2 PCS

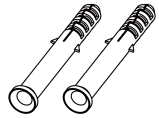


Screw
(M5 x 12)

1 PC



Wall Plug
(8 mm)
2 PCS



RFID Card

2 PCS



Cable Sealing Ring (M25)

1 PC



Cable Sealing Ring (M16)

1 PC



Screw
(M3 x 8)
(For spare use)

3 PCS



T10 Screwdriver

1 PC



Waterproof Ethernet Cable Gland

1 PC



T25 Screwdriver

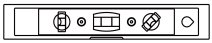
1 PC

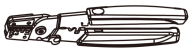


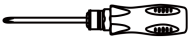
3.7 Recommended Tools

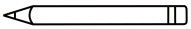
NOTE

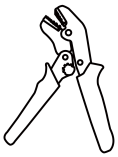
The tools mentioned below are not included in the package. Ensure they are readily available prior to installation.

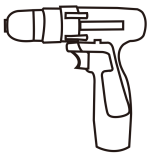
Spirit Level 

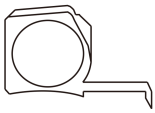
Crimping Tool 

Screwdriver (PH2) 

Pencil 

Wire Stripper 

Power Drill 

Tape Measure 

Drill Bit (8 mm) 

Multimeter 

4 Installation

IMPORTANT

- All required permits have been acquired in accordance with the local regulations.
- The AC input cable is available.
- There is **no voltage** on the AC input cable throughout the installation procedure.

4.1 Unpacking

1. Open the box.
2. Remove the charging station from the box.
3. Remove all the packaging materials from the charging station.
4. Ensure that all the parts are delivered according to the order.
5. Inspect the charging station and the parts for damage. If you find damage or the parts are not consistent with the order, contact your local dealer.

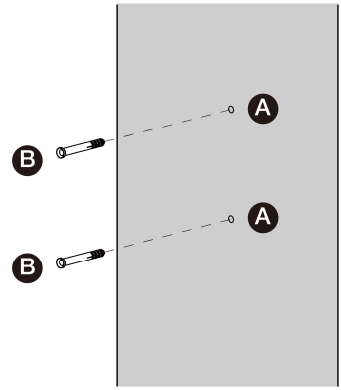
4.2 Preparation

- Install the charging station on a flat and vertical surface capable of supporting its weight (e.g. a finished brick or concrete wall, a pedestal, etc.). The maximum weight of a charging station is about 6 kg (13 lbs.).
- Install the charging station in a location that allows the charging cable to remain within its bending tolerance.
- The recommended installation height is between 850 and 1150 mm. The minimum outdoor height is 600 mm and that of indoor is 450 mm.
- Position the charging station in a location where it is not vulnerable to being damaged.

4.3 Mechanical Installation

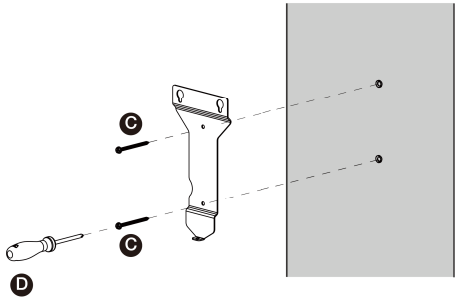
STEP 1

1. Place the wall dock against the wall and level it using a spirit level.
2. Mark the two lower mounting holes (**A**) with a pencil and drill two 8 mm holes.
3. Insert the two 8 mm wall plugs (**B**) into the holes.



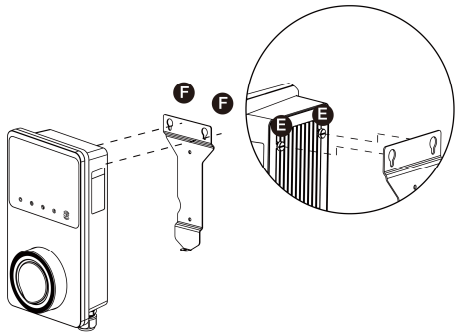
STEP 2

1. Attach the wall dock to the mounting location by inserting two M6 x 50 screws (**C**) into the lower mounting holes.
2. Tighten the two M6 x 50 screws using the PH2 screwdriver (**D**).



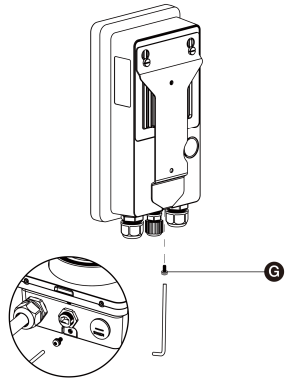
STEP 3

Attach the charging station to the wall dock by inserting the two protruding screws (**E**) on the back of the charging station into the two upper mounting holes (**F**). Slide the charging station downwards to engage the screws.



STEP 4

Insert and tighten the included M5 x 12 screw (**G**) into the hole at the bottom of the charging station to secure the charging station using the T25 screwdriver.



4.4 Power Supply Wiring

IMPORTANT

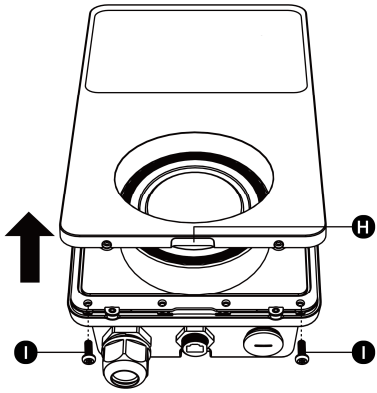
- Consult the local electrical codes for the correct wire size, based on the environment, the conductor type, and the rating of the charging station.
- Ensure that all the screws are tightened to the correct torque after the wiring is completed, and that there are no loosen screws at the terminal blocks.
- Ensure there is no copper wire or debris left inside of the charging station before switching on the electrical power to the charging station.

NOTE

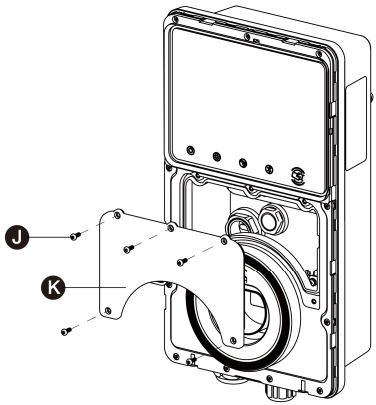
The three-phase charging stations also accept single-phase wiring. Refer to the three-phase wiring instructions to connect the L1, N, and PE wires to the corresponding terminals.

STEP 1

1. Remove the two screws (**I**) at the bottom of the charging station with the T10 Torx screwdriver. Then remove the faceplate from the middle of the clasp (**H**). **Set them aside.**



2. Unscrew the five screws (**J**) to remove the maintenance cover (**K**). **Set them aside.**



STEP 2

Single-phase Wiring:

1. Strip the wires to 12 mm.

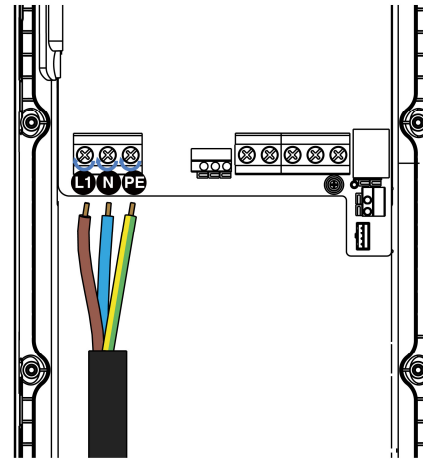
2. Loosen the lower-left cable gland, insert the AC input cable through the inlet hole, and pre-fix the cable gland.

3. Loosen the screws at the terminal block.

4. Insert the cable connector into the terminal block.

5. Connect the following wires as specified:

- L1 (Brown)
- Earth (PE, green/yellow striped)
- Neutral (N, blue)



6. Tighten the screws to 2 N·m and fix the cable gland.

Three-phase Wiring:

1. Strip the wires to 12 mm.

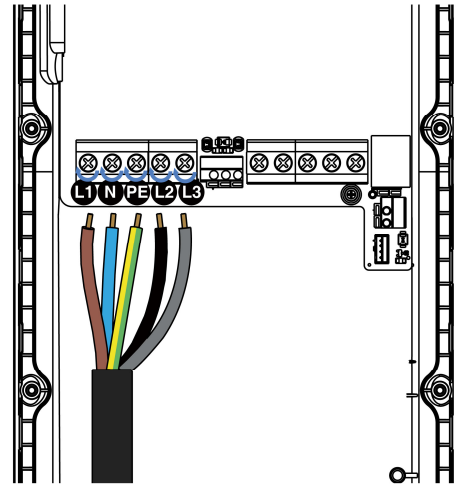
2. Loosen the lower-left cable gland, insert the AC input cable through the inlet hole, and pre-fix the cable gland.

3. Loosen the screws at the terminal block.

4. Insert the cable connector into the terminal block.

5. Connect the following wires as specified:

- L1 (Brown)
- Earth (PE, green/ Yellow striped)
- Neutral (N, blue)
- L2 (Black)
- L3 (Grey)



6. Tighten the screws to 2 N·m and fix the cable gland.

4.5 Internet Connection

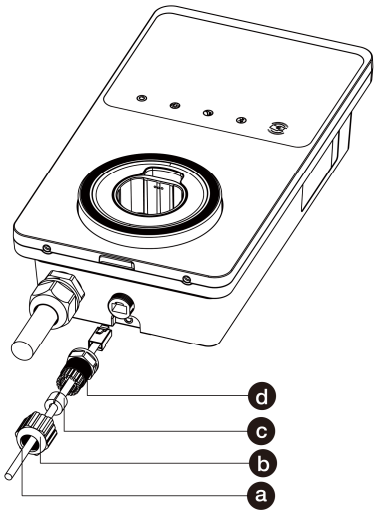
The charging station can be connected to the Internet via the Ethernet cable, cellular network or Wi-Fi.

Via the Ethernet Cable:

STEP 1

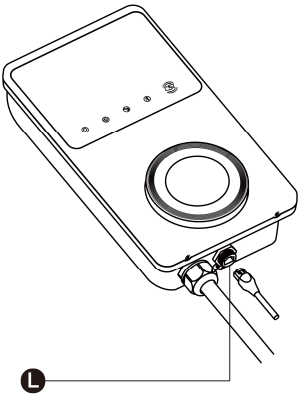
Connect the waterproof Ethernet cable gland to the Ethernet cable:

1. Put the Ethernet cable with RJ45 plug (**a**) through the nut (**b**) and the waterproof cap (**d**) (leave some space between them).
2. Connect the sealing ring (**c**) via its opening to the Ethernet cable and insert it into the waterproof cap.
3. Screw the nut into the waterproof cap and make sure they are securely fastened.



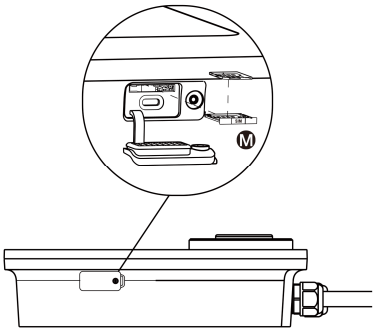
STEP 2

Put the RJ45 plug of the Ethernet cable into the RJ45 port (**L**) at the bottom of the charging station.



Via the Cellular Network:

1. Remove the M3 x 10 screw using the T10 screwdriver to open the SIM card cover.
2. Use an appropriate tool to press the tiny button next to the SIM card tray (**M**) and release the card tray.
3. Insert the SIM card into the tray. Ensure it is inserted correctly.
4. Reinstall the SIM card cover.



4.6 Finish Installation

4.6.1 Reinstall the Covers

1. Reinstall the inner cover by tightening the five screws to the right torque.

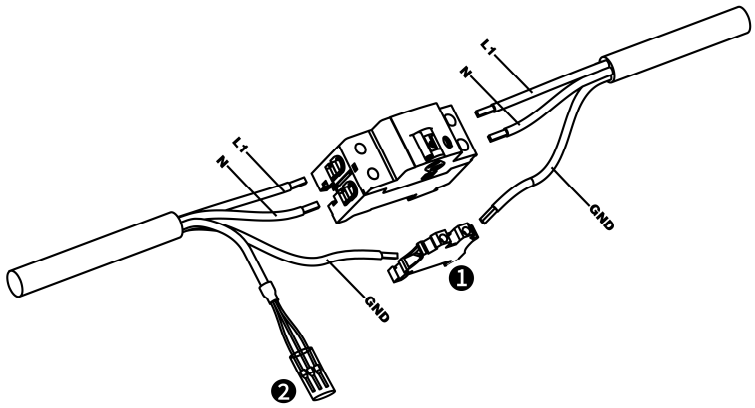
2. Reinstall the maintenance cover by tightening the two screws at the bottom of the charging station.

4.6.2 Distribution Box Wiring

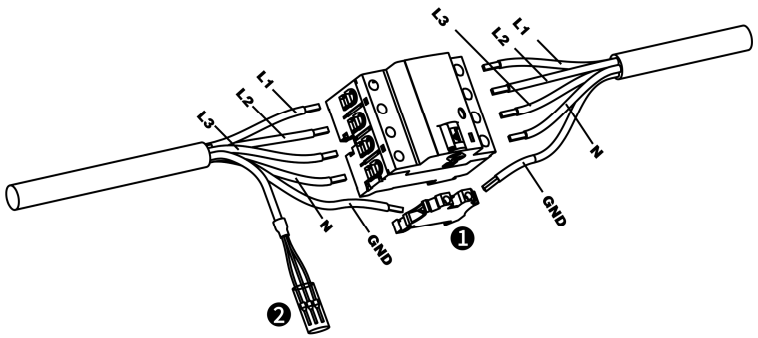
Procedures above complete the power supply wiring to the charging station. In order to complete the power supply wiring to the distribution box, connect the wires as specified on the terminal block.

If the charging station has the 485 communications cables and you do not need them, coil them with electrical tape respectively. See diagrams below for single-phase and three-phase wiring.

Distribution Box Wiring for Single-phase:



Distribution Box Wiring for Three-phase:



1. Terminal Block
2. RS485 Communications Cables with Electrical Tape

4.7 Protective Device

Devices	Specifications
Dedicated upstream protection device(s)	Options: RCD (Type A minimum) + MCB RCBO (Type A minimum)
Upstream overcurrent protection breaker, such as RCBO or MCB (The breaker serves as the main disconnect switch to the charging station.)	Breaker rating: 40 A for a 32 A rated charging station 20 A for a 16 A rated charging station Tripping characteristics: type C
Upstream residual-current device (RCD)	Minimum Type A, with a rated residual operation current of maximum 30 mA (Internal to charging station is DC fault current monitoring 4~ 6 mA.)

NOTE

The breaker value depends on the diameter and length of the cable, charging station rating, and the environmental parameters (for the electrician to decide).

The MaxiCharger AC Wallbox has the internal 30 mA AC and 6 mA DC residual current detection.

In some countries, local standards may require external protection devices. Check the local standards accordingly. External RCD+MCB or RCBO are also recommended as below:

- 7.4 kW: 30 mA Type A RCBO 230 V/40 A
- 11 KW: 30 mA Type A RCBO 400 V/20 A
- 22 kW: 30 mA Type A RCBO 400 V/40 A

For EV Ready requirement:

The circuit breaker must be curve C, 40A and a short-circuit current limited to 6000A to be sure of having a limitation of 75000 A^2/s for case B and 80000 A^2/s for case C. For the RCD part: meter 30 mA.

Otherwise, comply with local regulations.

5 Operation

5.1 Energizing the Charging Station

Turn on the circuit breaker and wait for the power supply to come on. There will be a series of self-check starts, making sure that the charging station works correctly and safely. If a recoverable error is detected, the charging LED illuminates yellow; if the error cannot be recovered, it illuminates red.

WARNING

Be careful when working with electricity.

5.2 Start Charging

5.2.1 Cable Model

1. Remove the charging handle from the cradle of the charger.

2. Insert the charging handle into the charging port on the EV.

3. Choose from the following ways to start a charge session:

   - Tap the RFID card on the RFID reader.
   - Use the Autel Charge app by tapping **Start** on the Charge screen.
   - If a charging schedule is set in the Autel Charge app, the charging station will initiate a charge session automatically as scheduled. (Scheduled charging case.)
   - If the Plug-and-charge function is enabled in the Autel Charge app, the charging station will automatically start charging once the charging handle is properly connected. (Plug-and-charge case.)

5.2.2 Socket/Shutter Model

1. Insert the charging handle into the charging port on the EV and the charging station socket outlet.

2. Choose from the following ways to start a charge session:

   - Tap the RFID card on the RFID reader.
   - Use the Autel Charge app by tapping **Start** on the Charge screen.
   - If a charging schedule is set in the Autel Charge app, the charging station will initiate a charge session automatically as scheduled. (Scheduled charging case.)
   - If the Plug-and-charge function is enabled in the Autel Charge app, the charging station will automatically start charging once the charging handle is properly connected. (Plug-and-charge case.)

NOTE

Ensure your EV is charging. The charging LED on the charging station should be flashing green. If you suspect the vehicle is not charging properly, try reconnecting the charging cable or contact the local dealer for support.

5.3 Stop Charging

NOTE

- If you disconnect the EV charging cable during the charge session, the charging station automatically disconnects the power supply. This stops all charging operations.
- When your vehicle is fully charged, the charging station will automatically disconnect the power supply.

5.3.1 Cable Model

1. To stop charging, choose either of the following two ways:

- Wait for the charge session to end and no further actions are required in the case of scheduled charging or plug-and-charge.
  - The charging LED will light solid green.
  - The Autel Charge app displays that the EV is fully charged.
  - If the charging station has a display, it will show that the EV is fully charged.
- End the charge session by tapping the RFID card on the RFID reader again or via the Autel Charge app by tapping **Stop** on the Charge screen.

2. Remove the charging handle from the EV's charging port and return it to the cradle of the charging station.

5.3.2 Socket/Shutter Model

1. To stop charging, choose either of the following two ways:

- Wait for the charge session to end and no further actions are required in the case of scheduled charging or plug-and-charge.
  - The charging LED will light solid green.
  - The Autel Charge app displays that the EV is fully charged.
  - If the charging station has a display, it will show that the EV is fully charged.
- End the charge session by tapping the RFID card on the RFID reader again or via the Autel Charge app by tapping **Stop** on the Charge screen.

2. Remove the charging handle from the charging station socket outlet and the EV charging port.

NOTE

For detailed instructions on how to use the Autel Charge app, please contact your sales representative for relevant documents.

6 Troubleshooting and Service

6.1 Troubleshooting Table

Item	Problems	Solutions
1	If the 485 communications cables are not needed to the distribution box.	Use the electrical tape to coil the 485 communications cables respectively.
2	The charging station is successfully bound, but the Bluetooth connection fails.	Check whether the QR code on the charging station is consistent with the QR code on the Quick Reference Guide. If so, make sure the Bluetooth is enabled on your mobile device; if not, contact customer support.
3	The charge session does not start as scheduled.	The EV charging cable cannot be inserted into the EV charge port when scheduling the charge for the first time. Insert the EV charging cable after the schedule is set up.

4	The charge card is lost.	Go to *Account > Charger > Charge via Card* to delete your card to avoid fraudulent use. Five charge cards can be bound to your account at most.
5	Over-voltage	Use the multimeter to check whether the voltage on the power input is too high. If the result is greater than or equal to 115 % of the rated voltage (263 V), contact local power grid company.
6	Under-voltage	Use the multimeter to check whether the voltage on the power input is not sufficient. If the result is less than or equal to 70 % of the rated voltage (161 V), contact local power grid company.
7	Missing phase	Check the wires in the distribution box. If two wires are connected together accidentally, separate the wires.
8	Inputs incorrectly wired: possibly Line and Neutral are inverted	Correct the wiring.
9	Ground fault	Ensure the charging station is earthed correctly.

10	Power failure	Ensure the switch to the circuit breaker is on.
11	Over-heating	➢ Check whether the EV charging cable is securely connected. ➢ Ensure the operating temperature is within the specified range on the product label. ➢ Stop charging. Restart charging in half an hour.
12	Residual current detected	Unplug the vehicle and plug in again. If the problem persists, contact your local representative.
13	Abnormal pilot voltage	Unplug the vehicle and plug in again.
14	Contactor fault	Contact your local representative.
15	Over current	Unplug the vehicle and plug it again.
16	Pilot fault	Use an Autel diagnostics tool to scan fault, and contact the vehicle manufacturer to clear fault.

17	No Proximity Pilot (PP) connection or PP fault	➢ Examine the connection of the EV charging cable. ➢ Ensure both EV charging cables are not broken or frayed. ➢ If the problem persists, contact your local representative.
18	E-lock failure	➢ Examine the connection of the EV charging cable. ➢ If the problem persists, contact your local representative.
19	Bluetooth module communication failure	➢ Make sure the Bluetooth is enabled on your mobile device and the charging station is powered on and operating properly. ➢ Forget the charging station in the Bluetooth settings on your mobile device and pair the charging station to your device via Bluetooth again. ➢ If the problem persists, contact your local representative.
20	Power relay fault	Contact a qualified electrician.

21	Update failure via Bluetooth	➢ Make sure the charging station is in idle status. ➢ Make sure the Bluetooth connection is working properly. ➢ If the problem persists, contact your local representative.
22	Internet connection fails	➢ You may use another device to connect to the same Internet, checking whether the Internet connection is working properly. ➢ If the problem persists, contact your local representative.
23	Home power system only supports single-phase. How to connect the power supply wiring?	Connect the L1, N, and PE wires to the charging station's terminal block as specified. Wiring to the distribution box is the same.

6.2 Service

If you cannot find solutions to your problems with the aid from the table above, please contact our technical support.

AUTEL Europe

- **Website:** www.autelenergy.eu
- **Phone:** +49 (0) 89 540299608 (Monday-Friday, 9:00AM-6:00PM Berlin Time)
- **Email:** evsales.eu@autel.com; evsupport.eu@autel.com
- **Address***:* Landsberger Str. 408, 4. OG, 81241 Munich, Germany

7 Specifications

Item	Description
Product Information	
Charging Type	Mode 3 charging
Input/Output Power Rating and Current	➢ Single-phase: 7.4 kW/32 A ➢ Three-phase: 11 kW/16 A ➢ Three-phase: 22 kW/32 A
Protection	Over-current, over-temperature, over-voltage, under-voltage, ground fault including DC residual current protection, integrated surge protection
Earth (Ground) Fault Protection	30 mA AC and 6 mA DC
Input/output Voltage	➢ 230 VAC ± 15%, single-phase ➢ 400 VAC/230 VAC ± 15%, three-phase ➢ 50 Hz
Earthing System	TT, TN, IT (single-phase)
Rated Insulation Voltage Ui	1500 VAC (AC input to output) 3000 VAC (AC to CP/PP)

Rated Impulse Withstand Voltage Uimp	4000 VAC (AC input to output) 6000 VAC (AC to CP/PP)
Rated Surge Current Withstand Capacity Ipk	3000 A
Rated Short-term Storm Resistance Icw	1500 A, 2 ms
Conditional Rated Short-Circuit Current Icc	1000 A
Degree of Pollution of the Macroenvironment	PD3
The Classification According to Electromagnetic Compatibility (EMC)	Class B
General Characteristics	
IP and IK Rating	➢ Cable model: IP65, IK08 ➢ Socket/shutter model: IP54, IK08
Operating Altitude	2, 000 m
Humidity	< 95 % RH, non-condensing
Operating Temperature Range	-40 °C to + 55 °C
Storage Temperature Range	-40 °C to + 85 °C
Mounting	Wall or floor using a pedestal

Applicability for Laypeople	Yes
Dimensions (H × W × D)	➢ Cable: 336 x 187 x 85 mm ➢ Socket/shutter: 336 × 187 × 115 mm
Weight	➢ Cable (5 m) model: 7.4 kW/11 kW: 4.7 kg ; 22 kW: 6.2 kg ➢ Cable (5 m) + LCD model: 6.45 kg ➢ Socket model: 7.4 kW: 3.3 kg ; 22 kW: 3.4 kg ➢ Socket + LCD model: 4.2 kg ➢ Shutter model: 7.4 kW: 3 kg ; 22 kW: 3.1 kg
User Interface	
Status Indication	➢ LED ➢ App
User Interface	Autel Charge app
Connectivity	➢ 4G (GSM900: 35 dBm, GSM1800: 32 dBm, WCDMA900/2100: 25dBm, LTE Band 1/3/7/8/20/38/40/28A: 25dBm) ➢ Bluetooth (Frequency: 2.4G, transmit power: 18 dBm)

	➢ Wi-Fi (Frequency: 2.4G, transmit power: 19.5 dBm) ➢ Ethernet
Communications Protocols	OCPP 1.6J
User Authentication	➢ App ➢ RFID card ➢ QR code
Software Update	
Software Update	➢ OCPP 1.6J ➢ App ➢ Web portal
Certifications and Standards	
Safety Standards	➢ EN IEC 61851-1 ➢ EN IEC 62311 ➢ EN 62479 ➢ IEC 62955
Certifications	➢ CE ➢ TUV ➢ TR 25:2016 (ICS 43.120)
Warranty	36 months

7.1 Cable Specifications

	Parameter	Specification
AC Input Cable (Three-phase, 32 A)	Wire size	Cross-section: 5 x 6 mm^2
	Length	1800 mm
	Strip length	12 mm
	Outside diameter	17.8 mm
AC Input Cable (Three-phase, 16 A)	Wire size	Cross-section: 5 x 2.5 mm^2
	Length	1800 mm
	Strip length	12 mm
	Outside diameter	14.6 mm
AC Input Cable (Single-phase, 32 A)	Wire size	Cross-section: 3 x 6 mm^2
	Length	1800 mm
	Strip length	12 mm
	Outside diameter	14.6 mm
RS485 cable	Wire size	Cross-section: 3 x 0.5 mm^2

NOTE

Typically, the 6 mm^2 insulated electrical wire is used. If it contradicts with your local rules, refer to your local rules.

7.2 Supplementary Specifications

This section introduces the requirements for the upstream protective devices, if needed. The recommended manufacturers and models for each protective device are listed in the second table.

	Item	Description
MCB+RCD	Current	AC 30 mA, DC 6 mA
	Protection	Over-current, over-voltage, under-voltage, over-temperature, ground fault including DC residual current protection, and integrated surge protection
	Voltage	Single-phase: 230 VAC Three-phase: 400 VAC
Circuit Breaker Box	Power Rating	Single-phase: 7.4 kW Three-phase: 11/22 kW
Emergency Stop	Specification	Available for 7.4 kW, 11 kW, and 22 kW models.

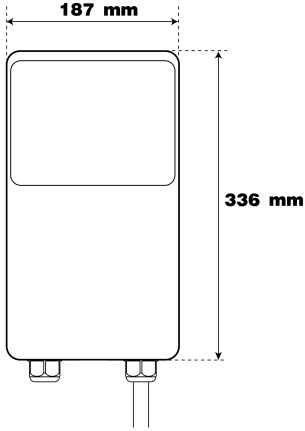
Manufacturers and Models

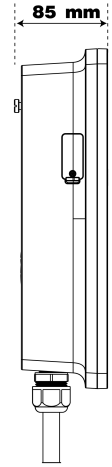
Item	Manufacturer	Model
Emergency stop	Schneider Electric Industries SAS	XALK178 Type: DC 12
Circuit breaker box for 11/22 kW model	Ensto Finland Oy	MODAB81PN (Size : 238x231x113 mm)
Circuit breaker box for 7.4 kW model	Ensto Finland Oy	MODAB41PN (Size : 166x231x113 mm)
MCB for 11/22kW model	Tianshui 213 Electrical Apparatus Co., LTD.	GSB2-63/4 C50 AC 400 V Instant trip type: Type C Number of poles: 4 Breaking ability, M: Icu = 6 kA Rated working current: 50 A

MCB for 7.4 kW model	Tianshui 213 Electrical Apparatus Co., LTD.	GSB2-63/2 C32A AC 400 V Instant trip type: Type C Number of poles: 2 Breaking ability, M: Icu = 6 kA Rated working current: 32A
RCD for 11/22 kW model	Tianshui 213 Electrical Apparatus Co., LTD.	VIGI-63/4 30 mA, DC 6 mA AC 400 V Number of poles: 4 Type A Rated remaining operating current (AC): 30 mA Rated remaining operating current (DC): 6 mA
RCD for 7.4 kW model	Tianshui 213 Electrical Apparatus Co., LTD.	VIGI-63/2 30 mA, DC 6 mA AC 400 V Number of poles: 2 Type A Rated remaining operating current (AC): 30 mA Rated remaining operating current (DC): 6 mA

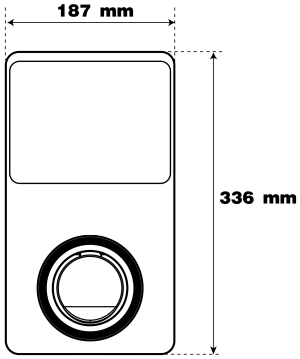
7.3 Product Dimensions

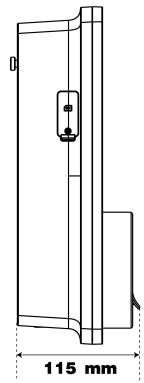
Cable Model





Socket/Shutter Model





Front View **Side View**

8 Compliance

The product is in conformity with the following standards and/or other normative documents:

EN 301 489-1 V2.2.3

EN 301 489-3 V2.1.1

EN 301 489-17 V3.2.4

EN 301 489-52 V2.1.1

EN 300 328 V2.2.2

EN 300 330 V2.1.1

EN 301 908-1 V13.1.1

EN 301 908-2 V13.1.1

EN 301 908 -13 V13.1.1

EN 301 511 V12.5.1

EN 50663

EN 50665

BS EN IEC 61851-1

EN IEC 61851-1

IEC 61851-21-2

EN IEC 61851-21-2

EN 50470-1

EN 50470-3

TR 25:2016 (ICS 43.1

9 Appendix

9.1 Fault Code List

The table below contains the fault codes on the Autel Charge Cloud and their descriptions on the Autel Charge app or the charging station's display.

Fault Codes	Descriptions
0	Mains overvoltage
1	Mains undervoltage
2	Mains over-frequency
3	Mains under-frequency
4	Phase loss
5	Line/Neutral reverse connection
6	Ground fault
7	Abnormal shutdown
8	Over-temperature
9	Leakage current
10	CP voltage abnormal/grounded

11	Contactor abnormal
12	Output overcurrent
13	Vehicle S2 failure
14	Vehicle CP negative failure
15	PP signal disconnected
16	PP signal abnormal
17	Electronic lock fault
18	PME fault
19	PME failed to disconnect relay
20	COMM error with control board
21	Electric meter abnormal
22	Data error
23	Leakage current (AC)
24	Trip fault
25	Sensor self-test fault
26	Output ground fault
27	Ground self-test fault
28	Microelectronics fault



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