MaxiCHARGER Gen2

SEVADIS
POWERING ELECTRIC VEHICLES

INSTALLATION AND OPERATION MANUAL

MaxiCharger Dual Charger

Version 1 CE Model

Trademarks

Autel® and MaxiCharger® are trademarks of Autel Digital Power Co., Ltd., registered in China, the United States and other countries. All other marks are trademarks or registered trademarks of their respective holders.

Copyright Information

Disclaimer of Warranties and Limitation of Liabilities

All information, specifications, and illustrations in this manual are based on the latest information available at the time of printing. Autel reserves the right to make changes at any time without notice. While information in this manual has been carefully checked for accuracy, no guarantee is given for the completeness and correctness of the contents, including but not limited to the product specifications, functions, and illustrations.

Autel will not be liable for any direct damages or for any special, incidental, or indirect damages or for any economic consequential damages (including the loss of profits).

For Services and Support:

Web: www.autelenergy.eu

Tel: 00-800-0825-1039 (United Kingdom, Netherlands, Germany, France, Italy, Switzerland)

00-800-0825-1052 (Denmark, Iceland)

20798959 (Sweden)

Working Time: Monday-Friday, CET 9:00 AM-6:00 PM, local working days

Email: evsupport.eu@autel.com

Address: Laan van Waalhaven 217, 2497GL ’s-Gravenhage, the Netherlands

For technical assistance in all other markets, please contact your local distributor.

Importer:

Autel Netherlands B.V.

Tel: +31 0707850054

Email: evsupport.eu@autel.com

Address: Laan van Waalhaven 217, 2497GL ’s-Gravenhage, the Netherlands

Web: www.autelenergy.eu

Autel Europe UK Ltd

Tel: +44 7399631447

Email: support.uk@autel.com

Address: 385 Centennial Park, Centennial Avenue, Elstree, Borehamwood, England, WD6 3TJ

Web: www.autelenergy.eu

CONTENTS

1. About This Manual

This manual describes the installation and use of the MaxiCharger Dual Charger. Prior to installation, read through this manual to become familiar with the instructions of this charger to ensure a successful installation and smooth operations.

1.1 Signal Word

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.

NOTICE

Provides helpful information such as additional explanations, tips, and comments.

1.2 Target Group

This documentation is intended for:

- Qualified installers who can properly complete the installation work and identify potential danger
- Users of the charger

1.3 Revision History

Version	Date	Descriptions
V1.0	2026.3	Initial version

1.4 Terminology

Term	Definition
AC	Alternating current
EV	Electric vehicle
OCPP	Open charge point protocol, an open standard for communication with chargers
RCBO	Residual current breaker with overload
RFID	Radio-frequency identification, a method of charging authentication
TCU	Transaction Control Unit, an intelligent hardware to handle the human-machine interface, metering, transaction, and communication with back office

2. Safety

The safety messages herein cover situations of which Autel is aware. 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.

2.1 Safety Precautions

DANGER

- Operating with power on during installation is strictly prohibited. Do not install or remove cables while the power is on. Contact between the cable core and conductor can generate arcs or sparks, leading to potential fire hazards or personal injury.
- When the equipment is powered on, irregular or incorrect operation may cause fire or electric shock, resulting in personal injury or property loss.
- Do not wear conductive objects like watches, bracelets, rings, and necklaces during operation to prevent electric shock and burns.
- Special insulating tools must be used during the operation to avoid electric shock or short circuit failure. The insulation withstand voltage level must meet the requirements of local laws, regulations, standards, and specifications.
- Avoid directly touching power supply components or using conductors or wet objects to make contact. Before touching any conductor or terminal, measure the voltage at the contact point to ensure there is no risk of electric shock.
- Do not use explosive or readily flammable substances near the charger.

WARNING

- Special protective equipment must be used during the installation, such as protective clothing, insulating shoes, goggles, safety helmets, insulating gloves, etc.
- Refer to the vehicle user manual to check if the vehicle releases hazardous or explosive gases when charging.
- Do not direct powerful water jets toward the charger.
- Do not put the connector into any liquid.

- Do not install or open the charger in wet environment (such as rain or heavy fog).
- Follow the instructions in the manual for installation, operation, and maintenance. Unauthorized modification, addition, or alteration of the equipment is prohibited, as is changing the installation sequence.
- Do not disable equipment protective devices and ignore warning, cautions, and precautions in the manual and on the equipment.
- If a fault that may cause injury or equipment damage is found, immediately stop operation, inform the person in charge, and take protective measures.
- Do not power on the equipment before the installation is completed or the equipment has not been confirmed by a professional.
- The equipment should only be installed, operated or maintained by licensed electricians who have received thorough training, obtained required qualifications and understood all necessary safety messages.
- The safety facilities should only be removed and the equipment should only be inspected by qualified professionals.
- The equipment should only be operated by operators, trained personnel, and professionals who have gained the related national required qualifications in special operations such as high-voltage operations, operations at heights, and operations of special equipment.
- The equipment or its parts (including software) can only be replaced by authorized professionals.
- No personnel except those operating the equipment are allowed to approach it.
- Children should be supervised when around this equipment.
- Do not insert fingers or foreign objects into the electric vehicle connector.
- Use of the equipment 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 equipment.
- Do not use the equipment if the flexible power cord or EV cable is frayed, broken, or damaged, or if it fails to operate.
- Do not use the equipment if the enclosure or the EV connector is frayed, broken or otherwise damaged, or fails to operate.
- Arc welding, cutting and other operations on the equipment are prohibited without evaluation by Autel.

- Adaptors or conversion adapters are not allowed to be used. Cord extension sets are not allowed to be used.
- Keep the connector away from heat sources, dirt or water.
- Only use the charger under the specified operating conditions.
- The user must not attempt to service or repair the charger as it does not contain user-serviceable parts.
- Local regulations may be applicable and may vary depending on your region/country of use. The qualified electrician must always ensure that the charger is installed in accordance with the local regulations.

CAUTION

- Handle the equipment with care during transportation. Do not subject it to strong force or impact or pull, twist, tangle, drag or step on the equipment, to prevent damage to it or any components.
- Ensure that all tools used for installing the equipment meet the required requirements. After the installation, collect all tools to ensure none are left inside the equipment.
- When conducting work around the equipment, ensure that protective measures are in place to prevent any potential damage.
- Be ready to support the weight to prevent injuries such as crushing or sprains when moving the equipment.
- Do not operate the equipment outside its operating range.
- Incorrect installation and testing of the equipment could potentially damage the vehicle's battery, components, and/or the equipment itself.
- Follow the instructions given in the vehicle user manual before choosing the charging location of the charger.
- Ensure that the charging cable is positioned so that it will not be stepped on, tripped over, driven over or subjected to excessive force or damage. Ensure that the charging cable is correctly stowed when not in use and that the connector does not touch the ground.
- Use this charger 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.
- Ensure that the charging cable is not damaged or tangled prior to use.

2.2 Disposal Instructions

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

- Obey the local rules when discarding parts, packaging materials or the charger.
- 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 charger with the household waste.

2.3 Cyber Security

2.3.1 Security Vulnerability Policy

Our Commitment

Autel is committed to maintaining the security of our products and services. We take security vulnerabilities seriously and work diligently to address them in a timely manner.

Scope

This policy applies to security vulnerabilities in:

- Autel software applications and firmware
- Autel web services and APIs
- Autel hardware products
- Autel cloud services and infrastructure

Out of Scope:

- Social engineering attacks
- Physical security issues
- Denial of service attacks that do not compromise data
- Issues requiring physical access to devices
- Vulnerabilities in third-party applications or services

Safe Harbor

We provide safe harbor for security researchers who:

- Act in good faith and follow responsible disclosure practices
- Do not access or modify data that does not belong to them
- Do not violate any laws or breach any agreements

- Do not cause harm to Autel, our customers, or users
- Do not publicly disclose the vulnerability before we have addressed it

We will not pursue legal action against researchers who comply with these guidelines.

Recognition

We appreciate the security research community's efforts. With your permission, we may acknowledge your contribution in our security advisories and release notes.

2.3.2 Vulnerability Handling Process

Our vulnerability handling process follows industry best practices and ensures timely response and resolution:

Step 1: Initial Response (1-3 business days)

We will acknowledge receipt of your report within 1-3 business days and provide a tracking number for your reference.

Step 2: Triage and Assessment (3-7 business days)

Our security team will review and assess the vulnerability, classify its severity, and determine the appropriate response.

Step 3: Investigation and Fix Development (Varies by severity)

- Critical: Immediate attention, fix within 7-14 days
- High: Priority fix, resolution within 30 days
- Medium: Scheduled fix, resolution within 90 days
- Low: Evaluated for future releases

Step 4: Testing and Validation

We will test the fix to ensure it resolves the vulnerability without introducing new issues.

Step 5: Release and Disclosure

Once the fix is ready, we will release an update and coordinate disclosure timing with you. We typically provide 30-90 days notice before public disclosure.

Step 6: Follow-up

We will follow up to confirm the fix and may request your assistance in verifying the resolution.

Communication:

We will keep you informed throughout the process. If you have questions or need updates, please reference your tracking number in all communications.

2.3.3 Contact Information

Security Team Email: security_report@autel.com

Response Time: We aim to respond to all reports within 1-3 business days

2.3.4 Data Deletion

You can contact Autel technical support to delete personal data related to backend services. Our technical support team will process the deletion and send you a confirmation email upon completion.

Additionally, you can delete device data and personal data by using the charger screen UI and the Factory Reset function in the O&M system.

3. General Introduction

This MaxiCharger Dual Charger is designed to charge an electric vehicle (hereinafter called “EV”). Tailored for commercial use, it features fast and efficient charging experience while offering best-value design and smart charging.

Intended Use

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

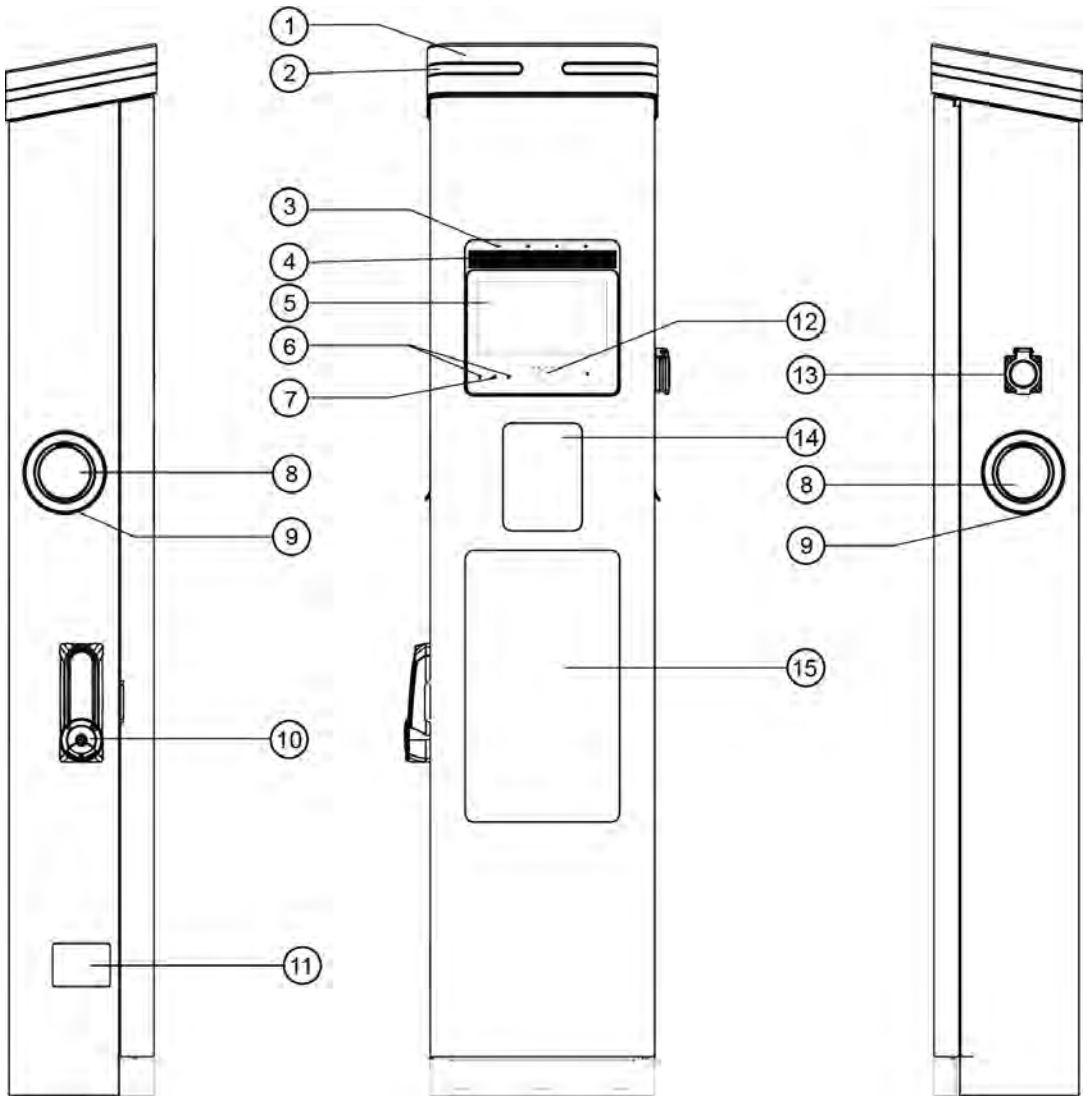
DANGER

- The charger must be operated as described in this manual or other related documents released by Autel. Failure to comply may result in human injury and/or damage to the property.
- Use the charger only as intended.

NOTICE

The images and illustrations depicted in this manual may differ slightly from the actual product.

3.1 Product Overview

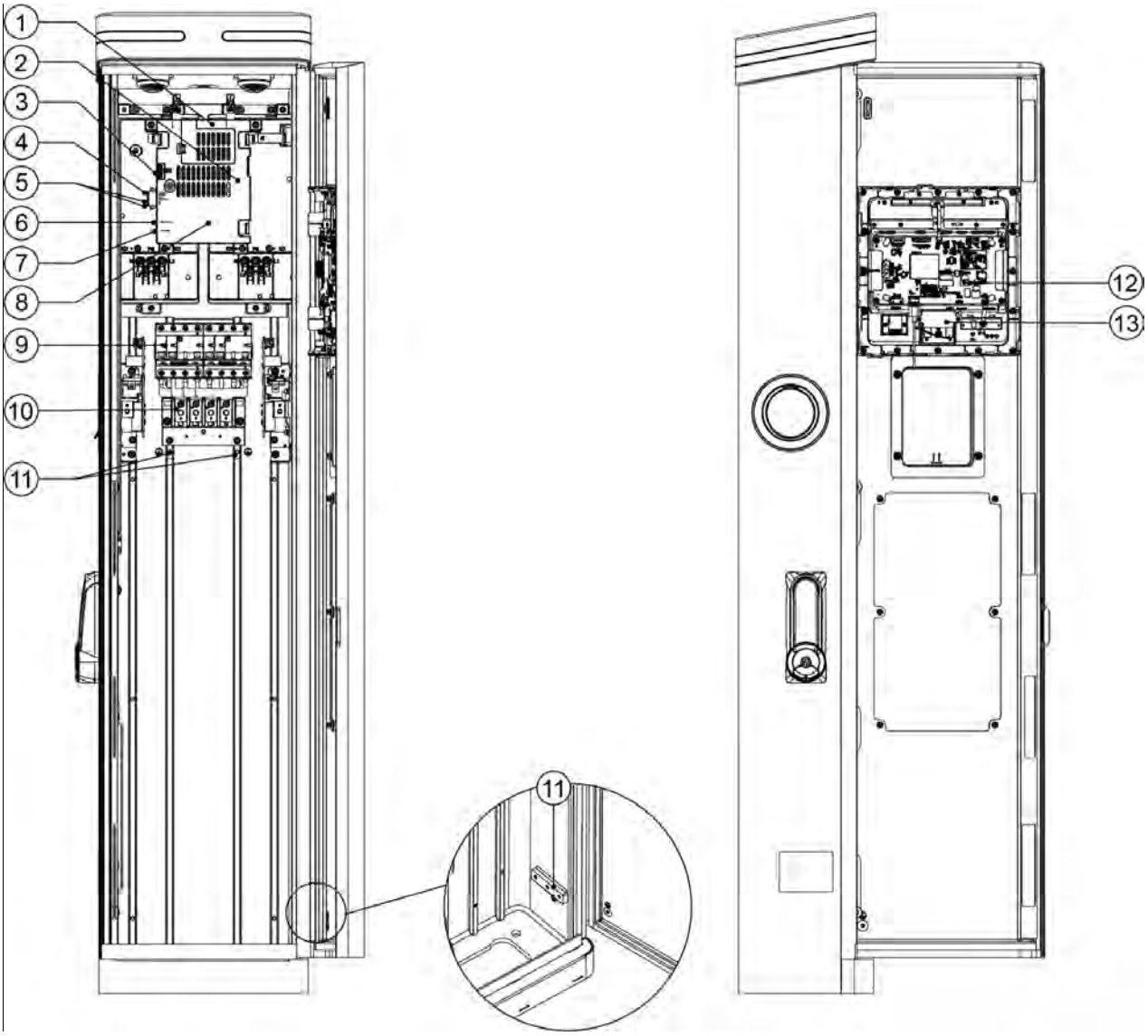


External View

1. Antenna
2. Top LED (Refer to *Table 3-1 LED Indicator Description* for details)
3. Microphone (Optional)
4. Speaker (Optional)
5. Touchscreen
6. Energy Pulse Output (Infrared Ray)
7. Ambient Light Sensor — detects ambient brightness
8. Type 2 Shutter/Socket
9. Socket LED (Refer to *Table 3-1 LED Indicator Description* for details)
10. Lock (with two cylinders)
11. Product Label
12. RFID Reader and EMV Reader (EMV is optional)
13. Schuko Socket (Only available for the EU/FR model)
14. POS Terminal (Optional)
15. Plastic Plate

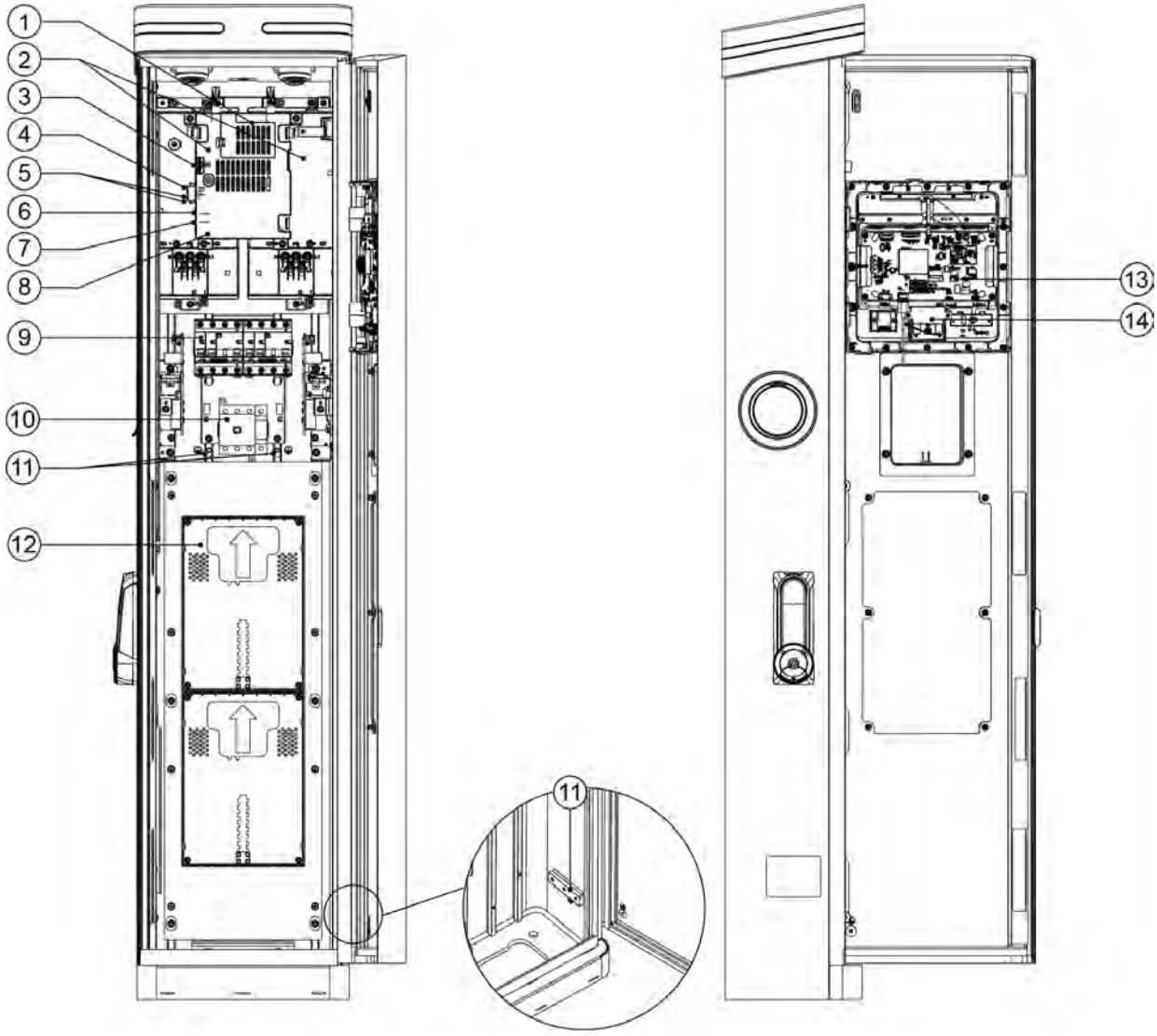
Table 3-1 LED Indicator Description

Color		Description
Socket LED	**Top LED**	
Breathes green	Off	The charger is booting up.
Breathes green	Off	The charger is in standby mode (inactivated).
Flashes green	Off	The charger is configuring.
Green light runs around the ring, making one full rotation every 2 seconds	Off	The chargers are activating in batch.
Lights solid green	Lights solid green	The charger is in standby mode (activated).
Lights solid blue	Lights solid blue	The charging gun is connected (not charging).
Breathes blue	Breathes blue	The EV is charging.
Lights solid blue	Lights solid blue	The current charging session has finished (charging gun connected).
Lights solid yellow	Lights solid yellow	The charger is in upgrade status. (The upgrade status does not take effect during download; it only takes effect during installation.)
Lights solid yellow	Lights solid yellow	The charger is disabled.
Lights solid red	Lights solid red	An error has occurred.
Lights solid red	Lights solid red	The charger is unavailable.
Lights solid cyan	Lights solid cyan	The charger is in scheduled mode (or is idle due to timer charging, smart charging plan, load balancing control, etc.)



Internal View – UK, EU/DE and EU/FR Models

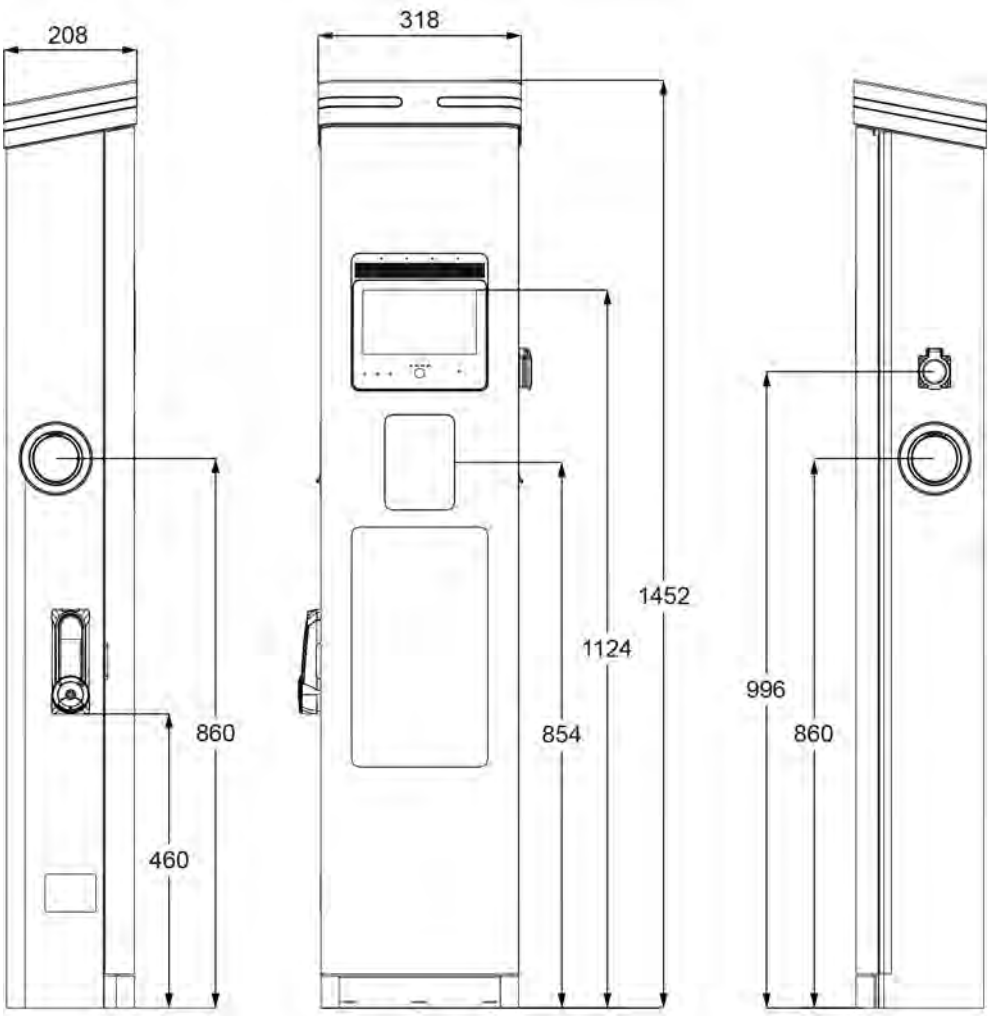
1. 4G/5G Module 2 (Optional)
2. ACU
3. SIM Card Socket (4G Module 1)
4. RS-485 Port
5. Dry Contact
6. LAN1 Port
7. LAN2 Port
8. TCU
9. RCBO (**manufacturer**: Zhejiang Chint Electrics Co.,Ltd, **model**: NB310L, **specifications**: AC400V, 40A, 3P+N, Type A 30mA, -35°C to +70°C)
10. AC Input Connector
11. PE Busbar
12. DPU
13. RFID Reader and EMV Reader (EMV is optional)



Internal View – EU/NL Model

1. 4G/5G Module 2 (Optional)
2. ACU
3. SIM Card Socket (4G Module)
4. RS-485 Port
5. Dry Contact
6. LAN1 Port
7. LAN2 Port
8. TCU
9. RCBO (**manufacturer**: Zhejiang Chint Electrics Co.,Ltd, **model**: NB310L, **specifications**: AC400V, 40A, 3P+N, Type A 30mA, -35°C to +70°C)
10. Switch-disconnector
11. PE Busbar
12. Mounting Plate
13. DPU
14. RFID Reader and EMV Reader (EMV is optional)

3.2 Product Dimensions



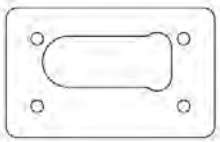
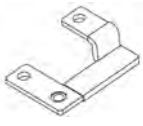
Left Side **Front Side** **Right Side**

NOTICE

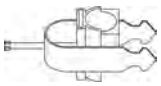
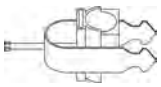
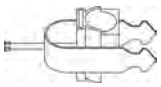
The Schuko socket is only available for the EU/FR model.

3.3 In the Box

3.3.1 UK, EU/DE and EU/FR Models

Charger 1 PC		Key 1 PC	
Expansion Bolt (M10 x 80) 4 PCS		Crimp Connector (SC16-6) 8 PCS	
Drilling Template 1 PC		Crimp Connector (SC25-6) 4 PCS	
Combination Screw (M6 x 12) 8 PCS		Quick Reference Guide 1 PC	
Nut (M10) 4 PCS		Packing List 1 PC	
Busbar 1 PC			

3.3.2 EU/NL Model

Charger 1 PC		Combination Screw (M6 x 12) 2 PCS	
Expansion Bolt (M10 x 80) 4 PCS		Nut (M10) 4 PCS	
Cable Clamp (22-30 mm) 1 PC		Key 1 PC	
Cable Clamp (18-22 mm) 1 PC		Quick Reference Guide 1 PC	
Cable Clamp (12-18 mm) 1 PC		Packing List 1 PC	

3.4 Technical Specifications

Product Information	
Charging Mode	Mode 3
Input/Output Power Rating and Current	Single phase: 2 x 7.4 kW (32A) Three phase TN/TT: 2 x 22 kW (32A) Three phase IT: 2 x 12.7 kW (32A)
Input/Output Voltage	400 VAC ± 10%, three phase (TN/TT), 50 Hz/60 Hz 230 VAC ± 10%, three phase (IT), 50 Hz/60 Hz 230 VAC ± 10%, single phase, 50 Hz/60 Hz
Earthing System	TT, TN, IT (Single phase and three phase)
Connector Type	IEC 62196 Type 2 Socket or IEC 62196 Type 2 Socket with Shutter
Residual Current Detection	Type A + DC 6 mA
Protection	Overcurrent, overvoltage, undervoltage, integrated surge protection, over temperature and PEN protection (only available for the UK model)
Vehicle Communication	ISO 15118-2, ISO15118-20
Card Reader	ISO 15693, ISO 14443 A/B
Power Measurement Accuracy	± 1.0%; build-in MID certified meter Eichrecht (only available for the EU/DE model)
General Characteristics	
Enclosure rating	IP55; IK10 Indoor and outdoor installation
Pollution Degree	III
Operating Altitude	2000 m
Operating Temperature Range	-30°C to + 50°C (Derating starts at 40°C, load not less than 65% at 50°C)
Storage Temperature Range	-40°C to +70°C
Mounting	Floor-mounted
Dimensions (H×W×D)	1452 × 318 × 208 mm

Product Information	
User Interface	
Status Indication	APP/LCD (8-inch touchscreen, 1280 x 720)
User Interface	Autel ChargeAPP, Autel ConfigAPP, Autel Charge Cloud
Connectivity	• Wi-Fi (IEEE 802.11a/b/g/n/ac WLAN, 2.4 GHz&5 GHz) • 4G Cat1 (GSM900: 35 dBm, GSM1800: 32 dBm, WCDMA900/2100: 25 dBm, LTE Band 1/3/7/8/20/38/40/28A: 25 dBm) • Ethernet (1000 Mbps and 100 Mbps) • RS-485 • Wi-SUN (863-870 MHz) • 5G, Optional (5G NR: n1/n3/n5/n7/n8/n20/n28/n38/ n40/n41/n75/n76/n77/n78, LTE-FDD: B1/B3/B5/B7/B8/B20/B28/B32, LTE-TDD: B38/B40/B41/B42/B43, WCDMA: B1/B5/B8)
Communication Protocols	OCPP 1.6 & OCPP 2.0.1 (upgradable to OCPP 2.1)
User Authentication	APP, RFID Card, Credit Cards
Software Update	
Software Update	OTA updates via web portal or via charger screen
Certification and Standards	
Safety and Compliance	EN IEC 61851-1, EN 62311, EN 62479, IEC 62955
Certification	CE
Codes and Standards	EMC Class A
Lifespan	10 + years

3.5 Connectivity Specifications

Radio Characteristics	Operating Frequency	Max. Transmit Power	Gain of Antenna
2G/3G/4G Communication	(TX/RX) 880 MHz - 915 MHz, 925 MHz - 960 MHz (GSM900), 1710 MHz - 1785 MHz, 1805 MHz - 1880 MHz (DCS1800), 1920 MHz - 1980 MHz, 2110 MHz - 2170 MHz (WCDMA B1), 880 MHz - 915 MHz, 925 MHz - 960 MHz (WCDMA B8), 1920 MHz - 1980 MHz, 2110 MHz - 2170 MHz (LTE Band1), 1710 MHz - 1785 MHz, 1805 MHz - 1880 MHz (LTE Band3), 2500 MHz - 2570 MHz, 2620 MHz - 2690 MHz (LTE Band7), 880 MHz - 915 MHz, 925 MHz - 960 MHz (LTE Band8), 832 MHz - 862 MHz, 791 MHz - 821 MHz (LTE Band20), 703 MHz - 748 MHz, 758 MHz - 803 MHz (LTE Band28), 2570 MHz - 2620 MHz (LTE Band38), 2300 MHz - 2400 MHz (LTE Band40)	25 dBm, 32 dBm conducted	Max.6.04 dBi
5G (Optional)	(NR) 1920 MHz - 1980 MHz, 2110 MHz - 2170 MHz (n1), 1710 MHz - 1785 MHz, 1805 MHz - 1880 MHz (n3), 824 MHz - 849 MHz, 869 MHz - 894 MHz (n5), 880 MHz - 915 MHz, 925 MHz - 960 MHz (n8), 832 MHz - 862 MHz, 791 MHz - 821 MHz (n20), 703 MHz - 748 MHz, 758 MHz - 803 MHz (n28), 2570 MHz - 2620 MHz, 2570 MHz - 2620 MHz (n38), 2300 MHz - 2400 MHz, 2300 MHz - 2400 MHz (n40),		

Radio Characteristics	Operating Frequency	Max. Transmit Power	Gain of Antenna
	2496 MHz - 2690 MHz, 2496 MHz - 2690 MHz (n41), 1432 MHz - 1517 MHz (n75), 1427 MHz - 1432 MHz (n76), 3300 MHz - 4200 MHz, 3300 MHz - 4200 MHz (n77), 3300 MHz - 3800 MHz, 3300 MHz - 3800 MHz (n78) (LTE-FDD) 1920 MHz - 1980 MHz, 2110 MHz - 2179 MHz (B1), 1710 MHz - 1785 MHz, 1805 MHz - 1880 MHz (B3), 824 MHz - 849 MHz, 869 MHz - 894 MHz (B5), 2500 MHz - 2570 MHz, 2620 MHz - 2690 MHz (B7), 800 MHz - 915 MHz, 925 MHz - 960 MHz (B8), 832 MHz - 862 MHz, 791 MHz - 821 MHz (B20), 703 MHz - 748 MHz, 758 MHz - 803 MHz (B28), 1452 MHz - 1496 MHz (B32) (LTE-TDD) 2570 MHz - 2620 MHz, 2570 MHz - 2620 MHz (B38), 2300 MHz - 2400 MHz, 2300 MHz - 2400 MHz (B40), 2496 MHz - 2690 MHz, 2496 MHz - 2690 MHz (B41), 3400 MHz - 3600 MHz, 3400 MHz - 3600 MHz (B42), 3600 MHz - 3800 MHz, 3600 MHz - 3800 MHz (B43) (WCDMA) 2100 MHz (B1), 1800 MHz (B3), 900 MHz (B8)		
5G (Optional)	GSM900/DCS1800		
	WCDMA Band 1/WCDMA Band 8		
	LTE TDD: Band 1/Band 3/Band 7/Band 8/Band 20/Band 28/Band 38/Band 40/Band 42/Band 43		
	FDD: n1/n3/n8/n20/n28/n38/n42/n43/n75/n76		

Radio Characteristics	Operating Frequency	Max. Transmit Power	Gain of Antenna
	n77/n78		
	GNSS: GPS, GLONASS, Galileo, BDS, QZSS		
2.4G Wi-Fi MS-01	2400 - 2483.5 MHz	EIRP 18.04 dBm	Max.3.46 dBi
2.4G Wi-Fi FC21	2400 - 2483.5 MHz	EIRP 18 dBm	Max.3.33 dBi
RFID Reader	13.56 MHz	7 dBμA/m @ 3m	0 dBi

4. Installation

4.1 Preparing for Installation

4.1.1 Unpacking

1. Open the package.
2. Remove the charger and other parts from the box.
3. Remove all packaging material.
4. Discard the packaging material.
5. Ensure that all parts are delivered according to the order. Refer to Section *3.3 In the Box*.
6. Do a visual inspection of the charger and the parts for damage. In case any damage is found or the parts are not consistent with your order, contact the delivery and Autel support.

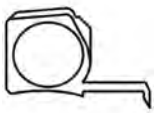
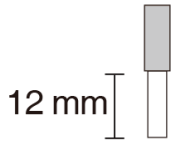
4.1.2 Recommended Tools

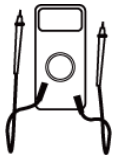
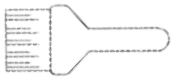
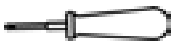
There are two installation methods of the products. Prepare the tools based on the installation methods (referring to Section *4.1.5 Preparing the Foundation*).

NOTICE

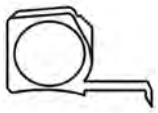
The recommended tools for all models as mentioned below are not included in the package. Ensure they are readily available prior to installation.

4.1.2.1 For Installation Option 1

Tape Measure 	Wire Stripper 	Phillips Screwdriver 
Crimping Plier 	Crimp Connector (Only required for dual-input wiring) 	Open Spanner 

Spirit Level 	Pencil or Marker 	Power Drill 
Drill Bit (10 mm) 	Multimeter 	Brush 
Flathead Screwdriver 	Socket Wrench (M10) 	

4.1.2.2 For Installation Option 2

Tape Measure 	Wire Stripper 	Phillips Screwdriver 
Crimping Plier 	Crimp Connector • For wires connected to the switch-disconnector  • For wires connected to the busbar 	Open Spanner 
Spirit Level 	Multimeter 	Flathead Screwdriver 

Socket Wrench (M10) 		

NOTICE

This table does not include the tools for foundation preparation. You need to prepare appropriate tools according to your specific requirements.

4.1.3 Electrical Design

DANGER

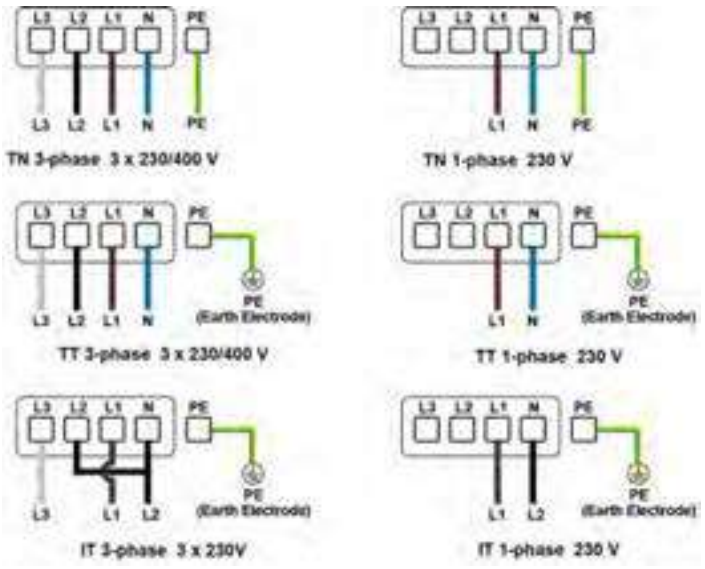
Connecting the charger to the power supply other than specified in this section can cause incorrect installation and the risk of electric shock, as well as damage to the charger, and injury or death.

NOTICE

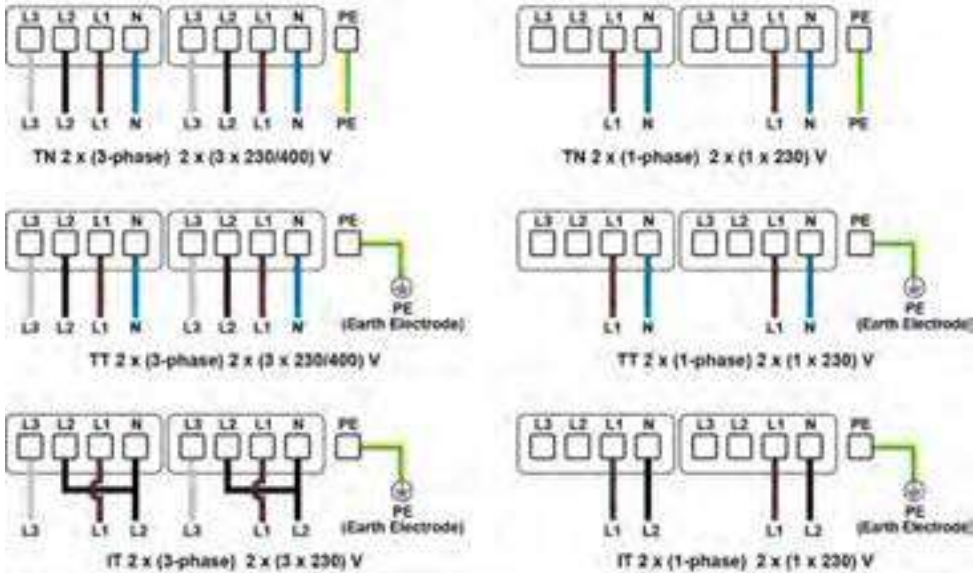
The EU/NL model does not support dual-input power wiring.

Earthing System	TN-system	PE cable
	TT-system	Earth electrode installed separately (self-installed)
	IT-system	Earth electrode installed separately (self-installed)

Observe the illustrations below for power supply connection of the charger and choose one way of connection based on the specifications of the power supply cabinet.



Single-Input Power Wiring Diagram



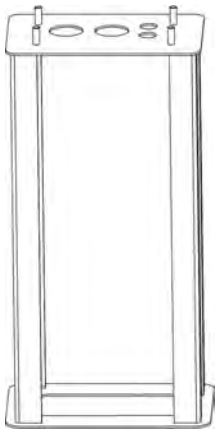
Dual-Input Power Wiring Diagram

4.1.4 Checklist

- The local installation regulations are identified and followed.
- All necessary permits are obtained from the local authority that has jurisdiction.
- The existing electrical load has been calculated to find the maximum operating current for the charger installation.
- A miniature circuit breaker (MCB) or fuse (NH000 80A, recommended) is installed upstream to ensure the RCBO trips before the MCB or fuse does.
- The correct cables are available at the installation site, and there is sufficient cable length to strip and connect the wires.
- The recommended installation tools are available at the site. Refer to Section *4.1.2 Recommended Tools*.

4.1.5 Preparing the Foundation

Select an installation method based on your product configuration. Option 1 is applicable to products without a mounting bracket. Option 2 is applicable to the EU/NL model products or products with a mounting bracket provided by Autel. Check if your product is configured with a mounting bracket before selecting the installation method.

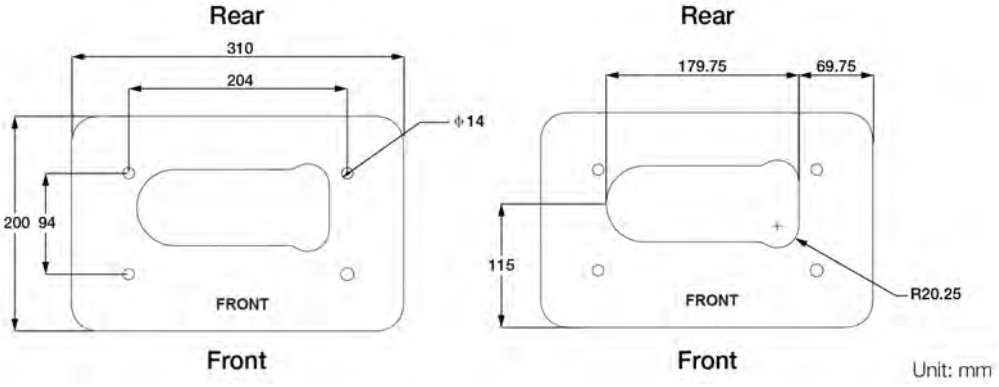


Mounting Bracket

4.1.5.1 Option 1 (Without Mounting Bracket)

STEP 1

Refer to the specification of the bottom of the charger to prepare the foundation.

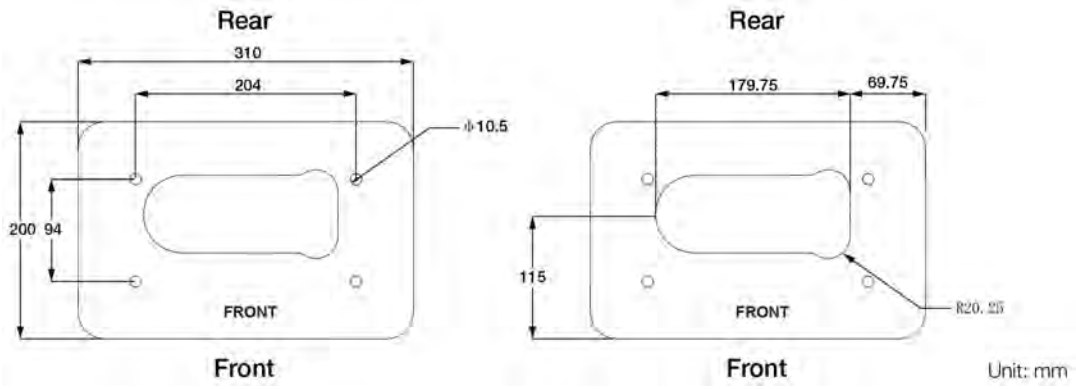


The table below describes the recommended cable length reserved above the surface of the foundation.

Cable Connection	Cable Length
AC Input Cable	700 - 900 mm
Earth Cable	200 - 300 mm/700 - 900 mm
Ethernet Cable (if available)	1200 - 1400 mm
RS-485 Cable (if available)	1200 - 1400 mm

STEP 2

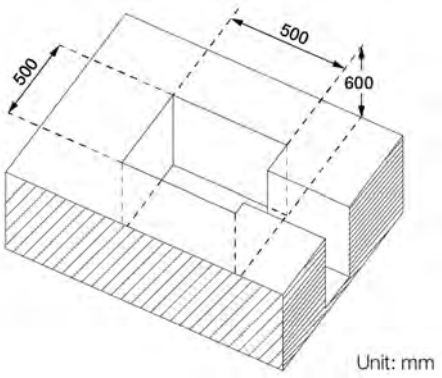
1. Place the drilling template on the foundation. Then level the template using a spirit level.
2. Mark the four mounting holes on the foundation. Remove the drilling template.
3. Drill into the holes measuring 10.5 mm in diameter and 60 mm in depth. Remove any debris using a brush.



4.1.5.2 Option 2 (With Mounting Bracket)

STEP 1

Dig a hole with the size of 500 x 500 x 600 mm (L x W x D) and trench a cable tunnel for the wiring conduit.



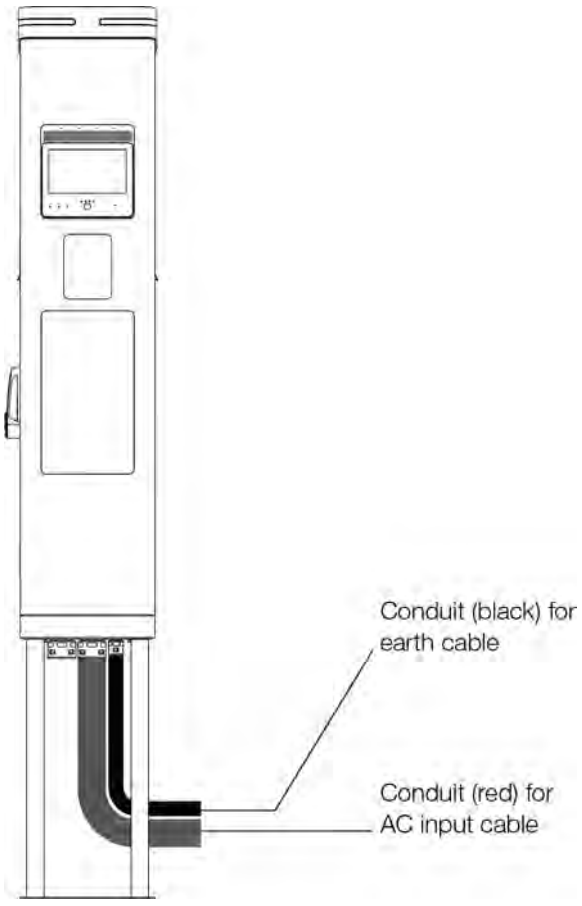
NOTICE

Prepare the foundation only with the mounting bracket provided by Autel.

STEP 2

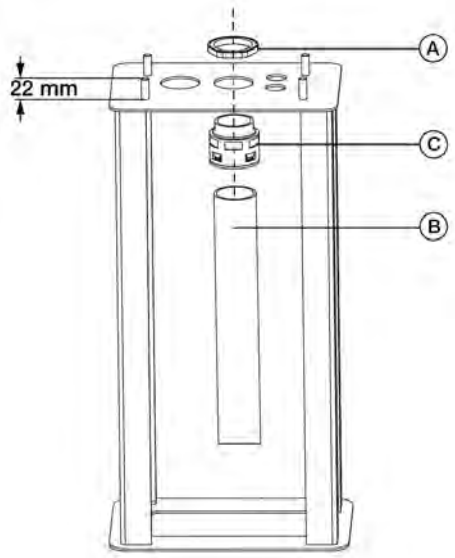
The table below describes the conduit and conduit joint used for each cable connection, and the recommended cable length reserved above the surface of the foundation.

Cable Connection	Conduit Size (Color)	Conduit Joint (Size)	Cable Length
AC Input Cable	φ54.5 mm (Red)	M50	700 - 900 mm
Earth Cable	φ25.5 mm (Black)	M25	200 - 300 mm/700 - 900 mm
Ethernet Cable (if available)	φ25.5 mm (Black)	M25	1200 - 1400 mm
RS-485 Cable (if available)	φ25.5 mm (Black)	M25	1200 - 1400 mm



1. Unscrew the nut (A) of the required conduit joint. Set it aside.
2. Insert the conduit (B) into the corresponding conduit joint (C).
3. Insert the conduit joint with the conduit to the cable entry at the top of the mounting bracket.
4. Screw the nut back to tighten the conduit joint to the mounting bracket.

5. Follow the previous steps to install the rest conduits required. Or seal the spare cable entry with the corresponding sealing plug.

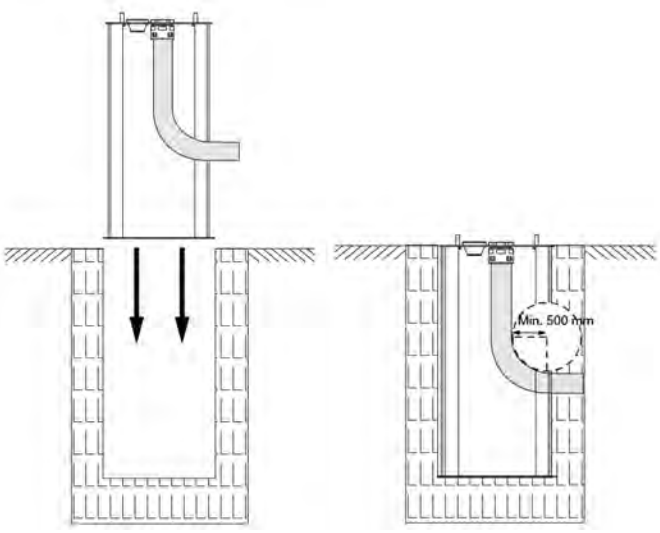


STEP 3

1. Feed the AC input cable, earth cable, Ethernet cable (if available) and RS-485 cable (if available) into the conduit. Ensure the cable length reserved above the ground is sufficient to reach the corresponding terminal.

2. Place the mounting bracket into the hole and run the conduits to the cable tunnel. The surface of the mounting bracket should be level with the ground.

3. Pour concrete into the hole and wait until the concrete has hardened.

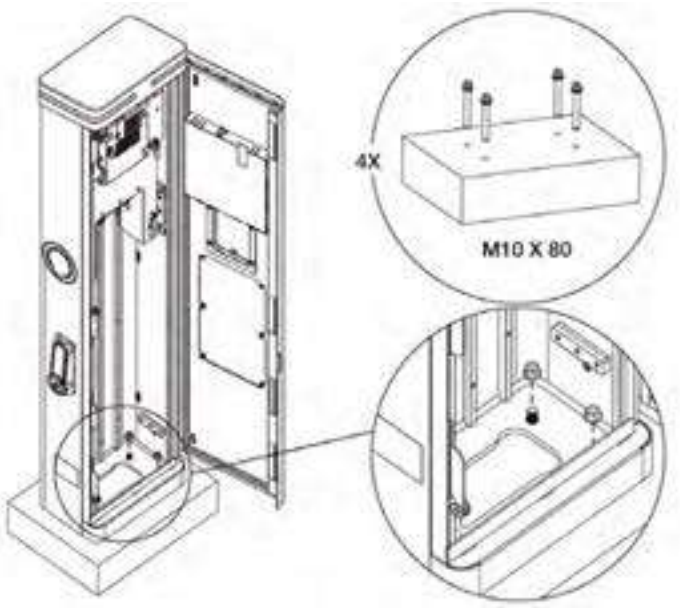


4.2 Mounting the Charger

4.2.1 UK, EU/DE and EU/FR Models

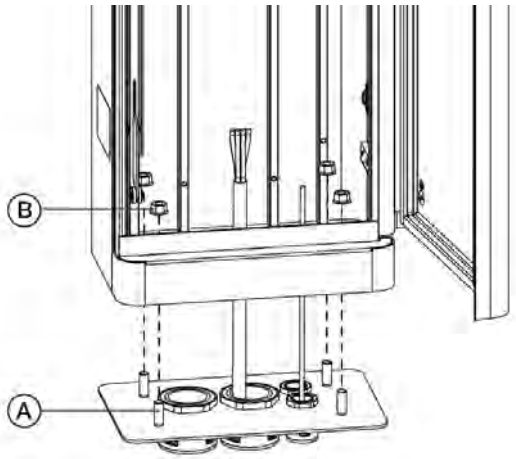
- **For products without a mounting bracket**

1. Open the door with the key.
2. Place the charger onto the foundation, aligning with the four mounting holes.
3. Tap the included M10 x 80 expansion bolts into the four mounting holes. Tighten the bolts to 32 Nm using an M10 socket wrench to secure the charger.



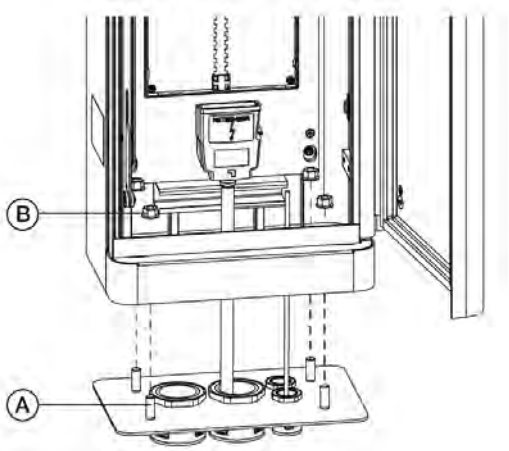
- **For products with a mounting bracket**

1. Open the door with the key.
2. Place the charger on the mounting bracket aligning with the four bolts (A) and run the cables through the bottom opening of the charger.
3. Insert and tighten the four M10 nuts (B) using a socket wrench.

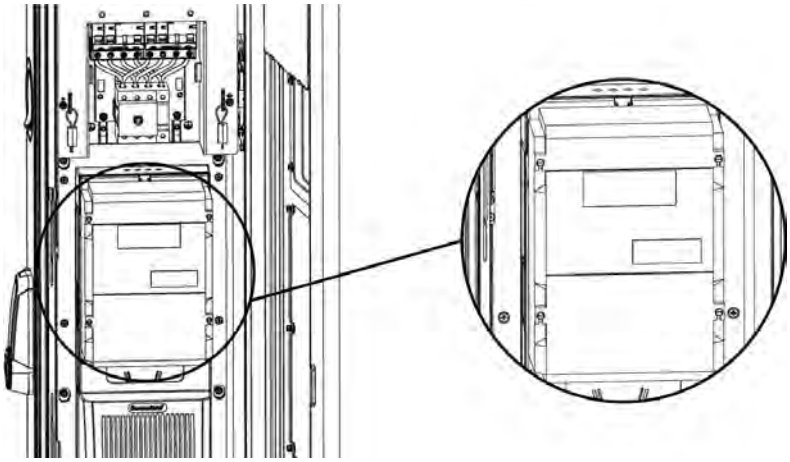


4.2.2 EU/NL Model

1. Open the door with the key.
2. Place the charger on the mounting bracket aligning with the four bolts (A) and run the cables through the bottom opening of the charger.
3. Insert and tighten the four M10 nuts (B) using a socket wrench.



4. Install the electricity meter on the mounting plate firmly.



4.3 Wiring

NOTICE

The instructions on wiring here are only applicable to the TN and TT systems. For the IT system, refer to the illustrations in Section *4.1.3 Electrical Design* for details.

4.3.1 UK, EU/DE and EU/FR Models

NOTICE

- Use the provided busbar for the 3-phase IT system wiring.
- For dual input, it is recommended to use 8 mm² to 16 mm² copper wires. For single input, it is recommended to use 16 mm² to 25 mm² copper wires. Choose based on the power supply available, local electrical code, and the distance from the distribution box.
- In a TT or IT system with dual input, it is recommended to use a 2 x 8 mm² or 1 x 16 mm² PE cable for multiple grounding connection.

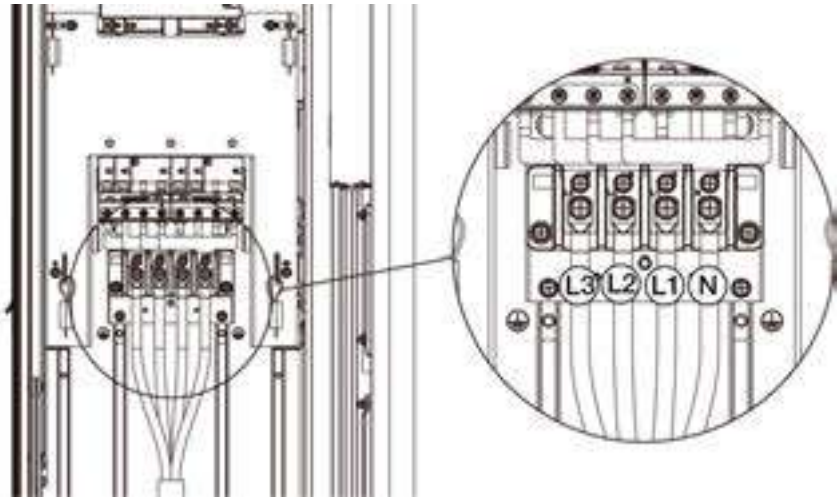
STEP 1

This product supports single-input and dual-input modes. Select the wiring method based on your actual needs.

➢ **Single-Input Wiring**

When connecting the device to the three-phase power:

1. Cut and strip the wires to the required length.
2. Crimp the wires to the crimp connectors using a crimping plier.
3. Connect the wires to the terminals of the AC input connector and tighten the combination screws to 3.5 Nm using a Phillips screwdriver as shown:
   - L1 (Brown)
   - L2 (Black)
   - L3 (Grey)
   - Neutral (N, blue)

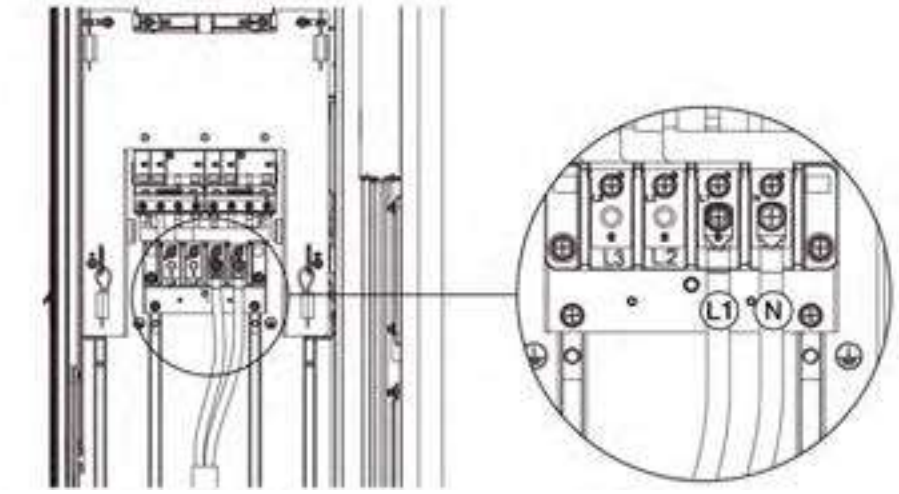


NOTICE

Do not connect the neutral wire here in a TN-C system.

When connecting the device to the single-phase power:

1. Cut and strip the wires to the required length.
2. Crimp the wires to the crimp connectors using a crimping plier.
3. Connect the wires to the terminals of the AC input connector and tighten the combination screws to 3.5 Nm using a Phillips screwdriver as shown:
   - L1 (Brown)
   - Neutral (N, blue)



NOTICE

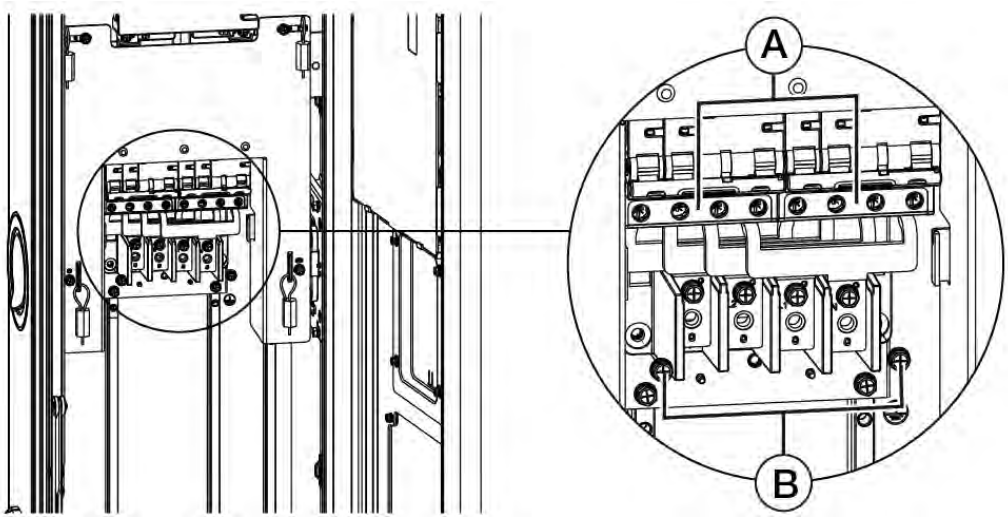
Do not connect the neutral wire here in a TN-C system.

➢ Dual-Input Wiring

Before connecting the wires, remove the AC input connector:

1. Use a Phillips screwdriver to loosen the eight screws (A) on the RCBO, and remove the two screws (B) on both side of the AC input connector.

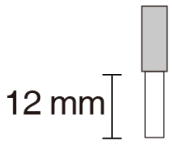
2. Remove the AC input connector.



When connecting the device to the three-phase power:

1. Cut and strip the wires to the required length.

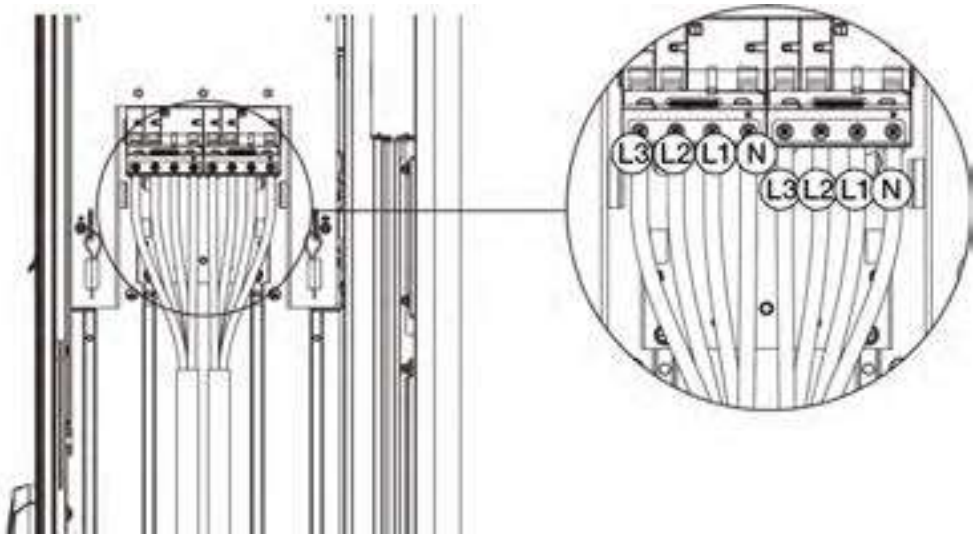
2. Crimp the wires to the crimp connectors using a crimping plier. (Flare length: 12 mm)



Flare Length

3. Insert the wires into the RCBO terminals and tighten the eight screws on the RCBO to 2 Nm using a Phillips screwdriver as shown:

   - 2 x L1 (Brown)
   - 2 x L2 (Black)
   - 2 x L3 (Grey)
   - 2 x Neutral (N, blue)

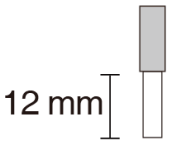


NOTICE

Do not connect the neutral wire here in a TN-C system.

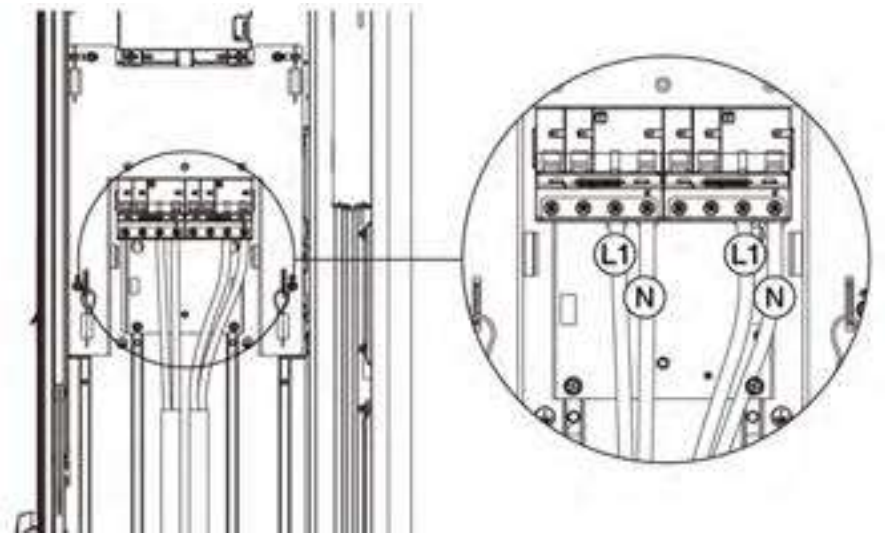
When connecting the device to the single-phase power:

1. Cut and strip the wires to the required length.
2. Crimp the wires to the crimp connectors using a crimping plier. (Flare length: 12 mm)



Flare Length

3. Insert the wires into the RCBO terminals and tighten the eight screws on the RCBO to 2 Nm using a Phillips screwdriver as shown:
   - 2 x L1 (Brown)
   - 2 x Neutral (N, blue)



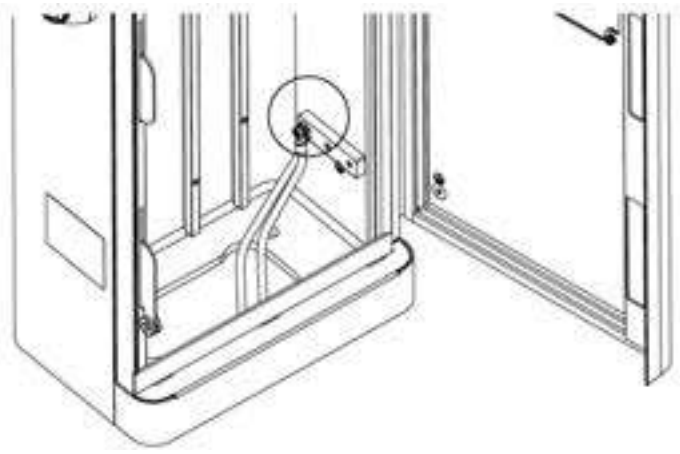
NOTICE

Do not connect the neutral wire here in a TN-C system.

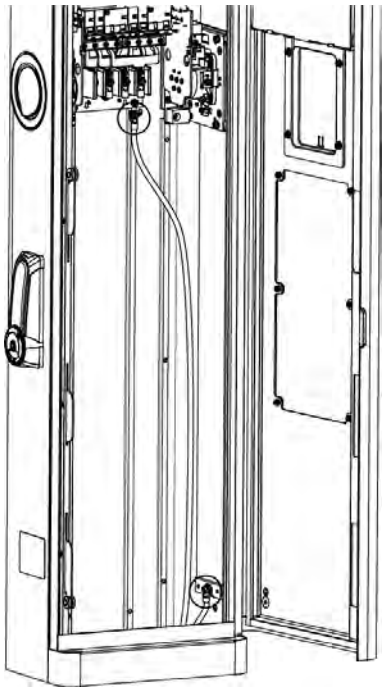
STEP 2

For TT, TN-C-S and TN-S systems, connect the PE cables to the PE busbar and tighten the combination screw(s) to 3.5 Nm using a Phillips screwdriver as shown.

- Option 1



- Option 2

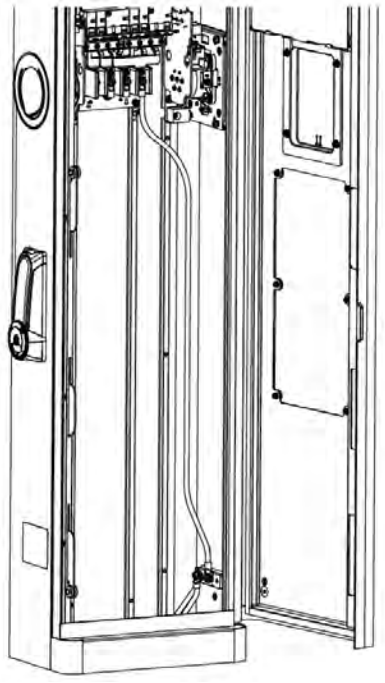


For the TN-C system, one PE cable and one PEN cable are needed for single input. Two PE cables and one PEN cable are needed in the dual input.

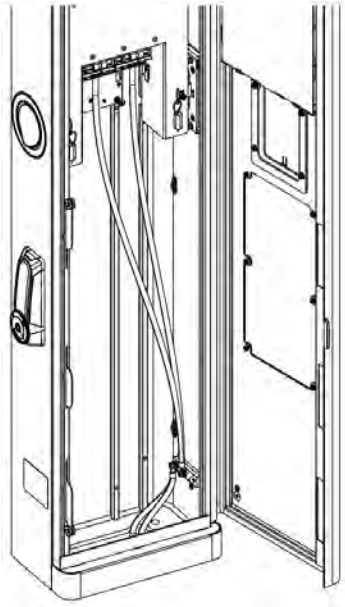
1. Connect the PEN cable to the PE busbar and tighten the combination screw to 3.5 Nm using a Phillips screwdriver.

2. Select the procedure below to connect the PE cable based on your connection type.

   - For single input, connect the PE cable from the PE busbar to the N terminal of the AC input connector, and tighten the combination screws to 3.5 Nm using a Phillips screwdriver.



- For dual input, connect two PE cables from the PE busbar to the two N terminals of the RCBO, and tighten the combination screw of the PE busbar to 3.5 Nm and the screws on the RCBO to 2 Nm using a Phillips screwdriver.



NOTICE

Where required by local regulations, a multiple grounding connection can be established by connecting the PE busbar of the charger to an external grounding electrode via a PE cable.

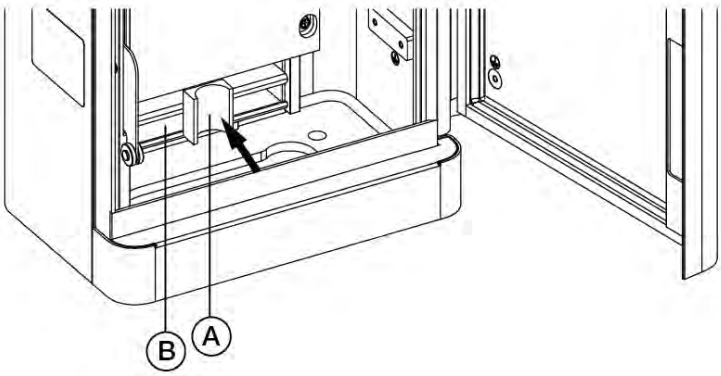
4.3.2 EU/NL Model

NOTICE

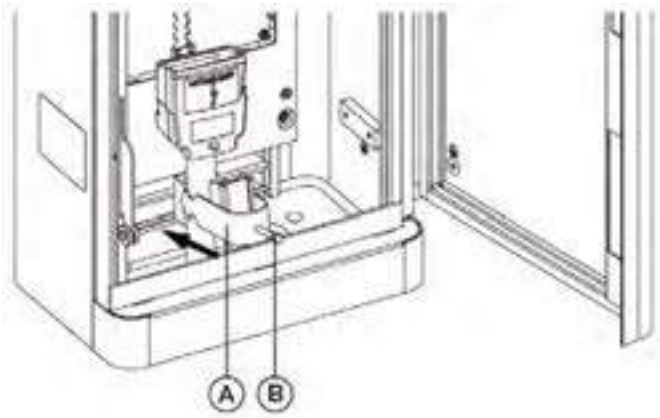
It is recommended to use 16 mm² copper wires. Choose based on the power supply available, local electrical code, and the distance from the distribution box.

STEP 1

1. Attach the back plate (A) onto the fixing bracket (B).



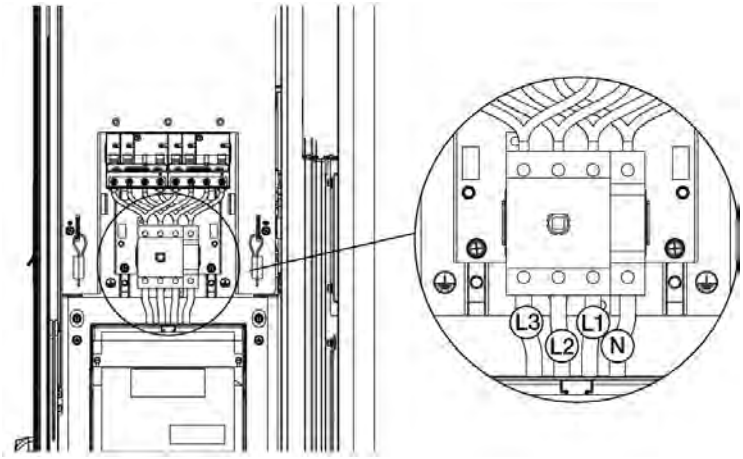
2. Run the AC input cable through the back plate. Then attach the cable clamp (A) onto the fixing bracket and tighten the screw (B) using an open spanner to fix the cable.



STEP 2

When connecting the device to the three-phase power:

1. Cut and strip the wires to the required length.
2. Crimp the wires to the crimp connectors using a crimping plier.
3. Use a Phillips screwdriver to loosen the screws on the switch-disconnector.
4. Insert the wires into the switch-disconnector terminals and tighten the screws to 2 Nm using a Phillips screwdriver as shown:
   - L1 (Brown)
   - L2 (Black)
   - L3 (Grey)
   - Neutral (N, blue)

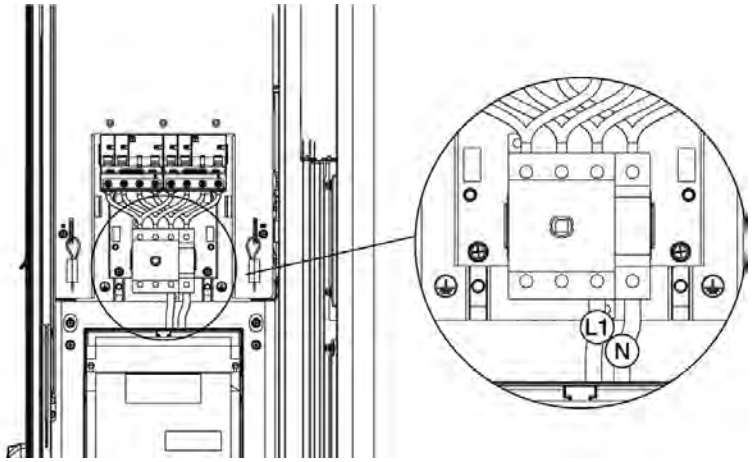


NOTICE

Do not connect the neutral wire here in a TN-C system.

When connecting the device to the single-phase power:

1. Cut and strip the wires to the required length.
2. Crimp the wires to the crimp connectors using a crimping plier.
3. Use a Phillips screwdriver to loosen the screws on the switch-disconnector.
4. Insert the wires into the switch-disconnector terminals and tighten the screws to 2 Nm using a Phillips screwdriver as shown:
   - L1 (Brown)
   - Neutral (N, blue)

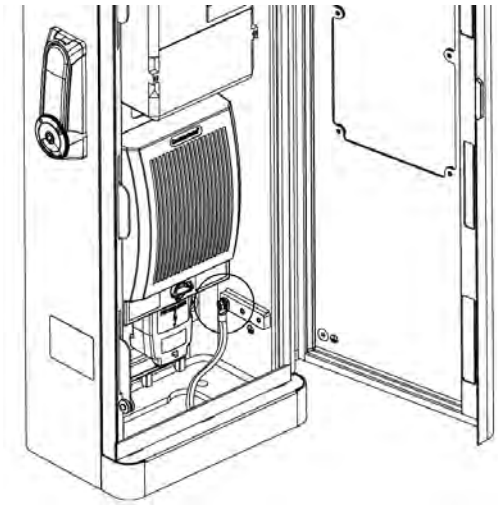


NOTICE

Do not connect the neutral wire here in a TN-C system.

STEP 3

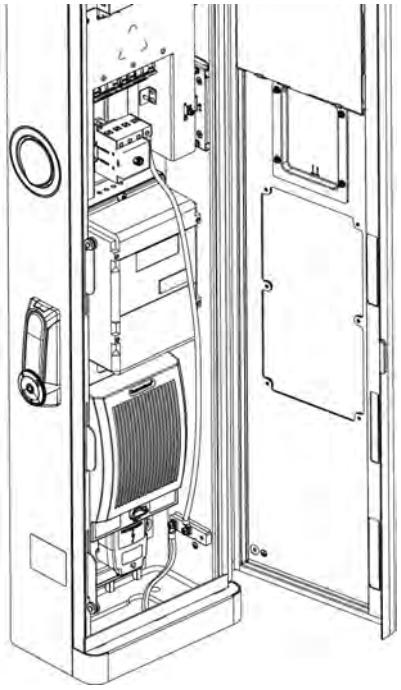
For TT, TN-C-S and TN-S systems, connect the PE cable to the PE busbar and tighten the combination screw to 3.5 Nm using a Phillips screwdriver as shown.



For the TN-C system, one PE cable and one PEN cable are needed.

1. Connect the PEN cable to the PE busbar and tighten the combination screw to 3.5 Nm using a Phillips screwdriver.

2. Connect the PE cable from the PE busbar to the N terminal of the switch-disconnector, and tighten the combination screw of the PE busbar to 3.5 Nm and the screw on the switch-disconnector to 2 Nm using a Phillips screwdriver.



NOTICE

Where required by local regulations, a multiple grounding connection can be established by connecting the PE busbar of the charger to an external grounding electrode via a PE cable.

4.4 Cable Connection

4.4.1 Internet Connection

The MaxiCharger Dual Charger can access the Internet via Ethernet cable, cellular network or Wi-Fi.

The instructions here take the UK model as example. Detailed procedures of Internet connection for the UK model are the same as other models.

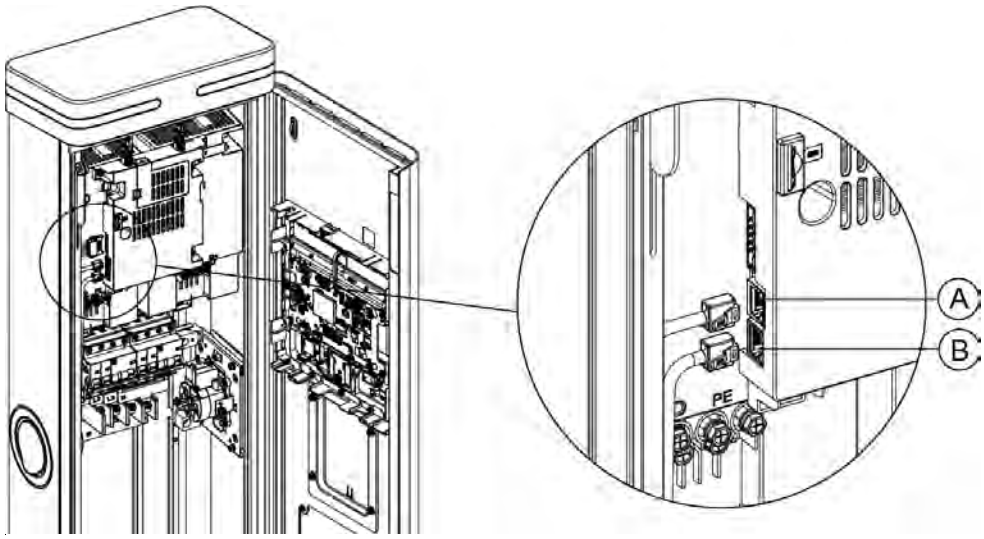
4.4.1.1 Via Ethernet Cable

NOTICE

- Use Cat6 and network cable with twisted pair wires.
- Use shielded industrial Ethernet cables only.
- For outdoor installation, use a UV-stabilized network cable.
- If an RJ45 plug is not pre-installed, install it on the network cable after routing the cable into the charger.

Plug the Ethernet cable with the RJ45 plug into LAN1 port (A) or LAN2 (B) port as shown.

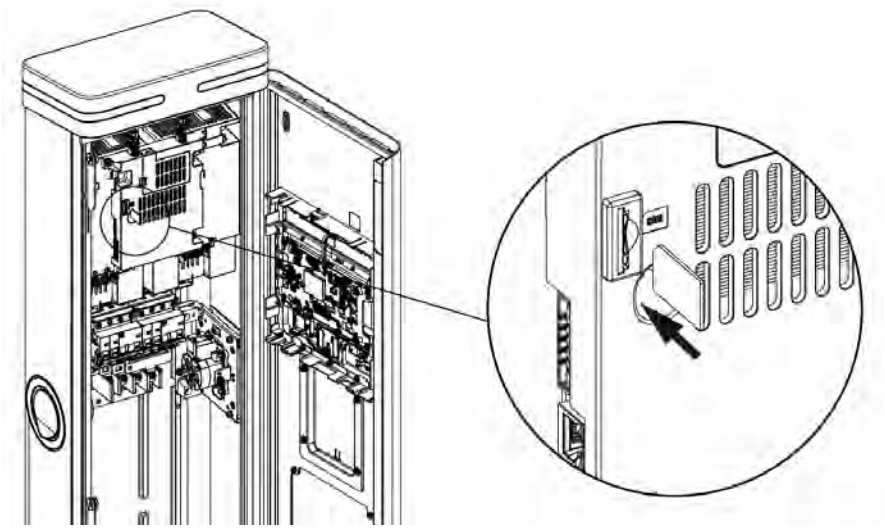
- LAN1 port supports 1000 Mbps.
- LAN2 port supports 100 Mbps.



4.4.1.2 Via Cellular Network

1. Insert the SIM card (Micro SIM) into the slot with the chip facing left and the orientation notch facing down as shown.

2. Press the SIM card and it will eject for taking out.

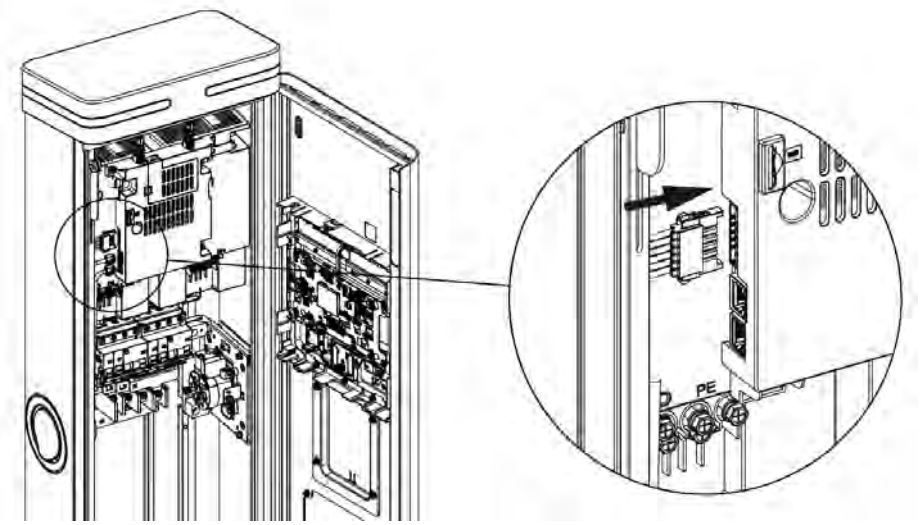


4.4.1.3 Via Wi-Fi

To connect the charger to the Internet via Wi-Fi, please finish the installation first and refer to the activation task section in the Commissioning Guide.

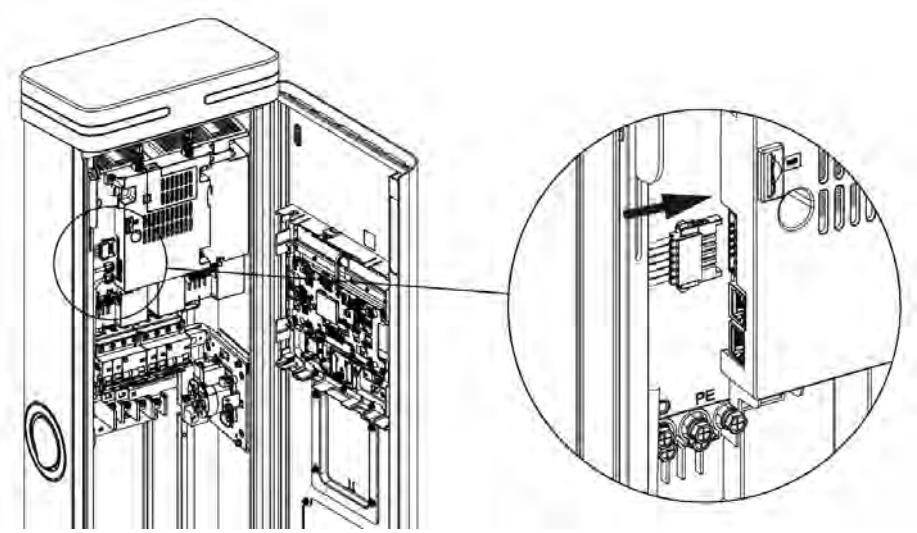
4.4.2 RS-485 Cable Connection

Plug the RS-485 cable into the RS-485 port as shown.



4.4.3 Dry Contact Cable Connection

Plug the dry contact cable into the dry contact port as shown.



4.5 Finishing Installation

Ensure that all installation and wiring are secured and correct. Apply fireclay to seal any gaps or clearances. Then close the door and make sure it is properly locked. The installation is now completed.

CAUTION

Ensure all electrical connections are clean, tight, and free of wire strands and metal shavings.

5. Commissioning

5.1 Commissioning Procedure

1. Ensure that the equipment is installed according to the instructions in this manual.

2. Ensure that all the screws are tightened to the correct torque after the wiring is completed, and that there are no loose screws at the conductor terminals.

3. Ensure there is no copper wire or debris left inside of the equipment before switching on the electrical power to the equipment.

4. Once the equipment is properly installed and all electrical connections have been safely made, switch on the power to the circuit from the circuit breaker and wait for the power supply to come on. There will be a series of self-checks. Make sure that the equipment works correctly and safely.

WARNING

Be careful when working with electricity.

Scan the QR code below to access the instructions for commissioning.

Or click the link below to access the commissioning guide.

https://strapicdn.autelenergy.com/autel_energy/media/Maxi_Charger_Single_Charger_Commissioning_Guide_UL_6a6c7069cf.pdf

5.2 Setting the OCPP Parameters

The OCPP parameters can be set via the Autel ConfigApp.

NOTICE

- The OCPP parameter settings should be performed by an installation engineer.
- The illustrations depicted in this section may differ slightly from the actual product.

1. Launch and log in to the Autel ConfigApp. For details on app download and login method, refer to the Commissioning Guide.
2. Select the merchant.

3. On the Tickets screen, tap **Devices** to enter the Devices screen.

4. Select a device from the list or search a device by entering the device name or serial number.

5. Tap **OCPP** to enter the Modify OCPP screen.

6. Tap **Edit** on the upper-right of the screen, and set the OCPP parameters as required.

7. Tap **Submit** on the upper-right of the screen to save the settings.

6. Operation

6.1 Charging Operations

Before beginning a charge session, scan the QR code below to download the Autel ChargeApp to a mobile device from the Google Play or App Store. Then register an account. You are now ready to use the app to charge the vehicle.

6.1.1 Start Charging

1. Insert one end of the charging cable into the charging port on the EV and the other end to the charger socket outlet.
2. Choose from the following ways to start a charge session:
   - Tap the RFID card on the RFID reader.
   - Use the Autel ChargeApp by tapping **Start** on the Charging screen.
   - Credit card. (Only available for chargers with a POS device.)
   - Enter the PIN.
   - Dial the phone number.
   - Scan the QR code
   - Autocharge
   - PnC

6.1.2 Stop Charging

1. To stop charging, choose either of the following two ways:
   - Wait for the charge session to end.
     - The Autel ChargeApp displays that the EV is fully charged.
     - The display will show that the EV is fully charged.
   - End the charge session manually

- By tapping the RFID card on the RFID reader again
- Via the Autel ChargeApp by tapping **Stop** on the Charging screen.
- Via the charger screen by tapping **Stop**.

2. Remove the charging cable from the charger socket outlet and the EV charging port.

NOTICE

- If the connector is unplugged during the charge session, the charger automatically disconnects the power supply. This stops all charging operations.
- When the vehicle is fully charged, the charger will automatically disconnect the power supply.

6.2 Display Descriptions

6.2.1 Standby Screen

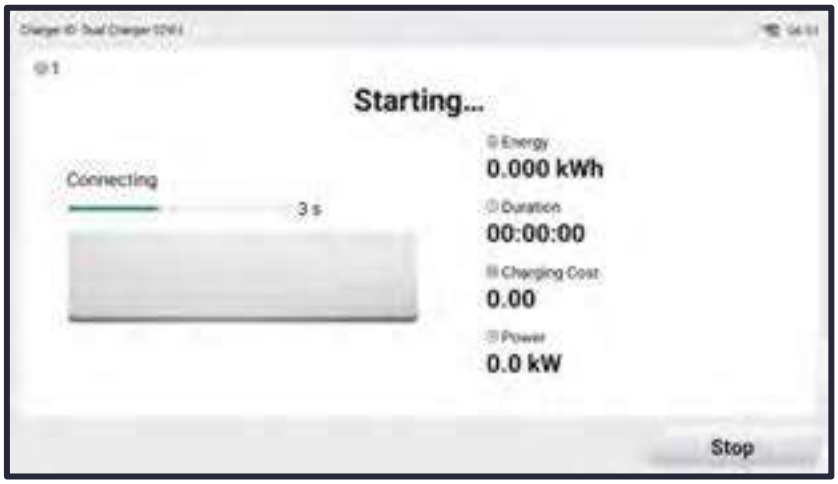
1. Top screen — displays the Charger ID, the WIFI signal and the time (tap to view charging instructions)
2. Middle screen — tap to select a connector
3. Bottom screen — tap the lower left and/or lower right bottom to select the connector; tap the middle bottom to view the charging costs, help and adjust the language.

The display shows the Standby screen when the charger is in idle status, indicating that the charger is ready for use. When this screen appears, choose the left connector or the right connector to enter the Authorization screen, or the Authorization screen will automatically appear once an EV is connected.

6.2.2 Authorization Screen

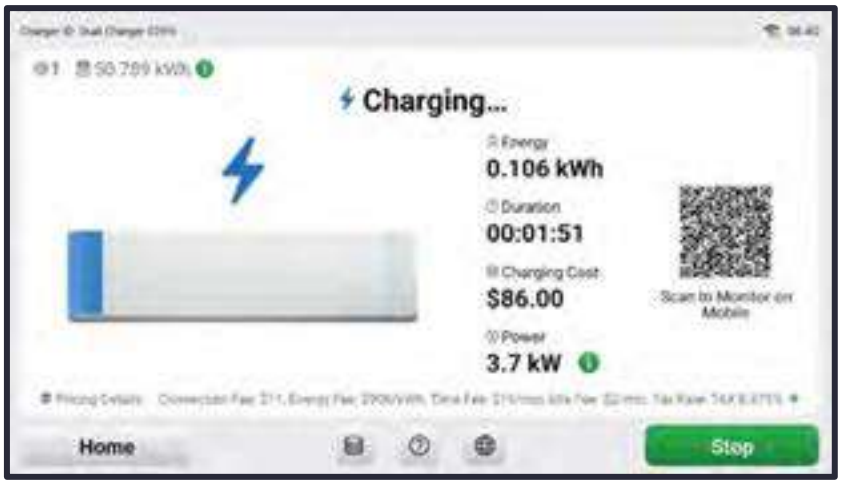
Choose an authorization method to start a charge session — Autocharge, RFID card, credit card, QR code, phone number and PIN code.

6.2.3 Start Charging Screen



6.2.4 Charging Screen

The Charging screen will show real-time charging progress, the volume, charging duration, current cost, as well as current power.



6.2.5 Stop Charging Screen

When the charge session ends, the Charging Stopped screen will appear.

6.2.6 Transaction Details Screen

After the connector is removed from the EV charging port, the Transaction Details screen will appear.

6.2.7 Error Screen

The display shows different error messages depending on the error type. Resolve the problem(s) by following the on-screen instructions, contacting Autel technical support or trying another charger. Below is an example for the error screen:

If the connector is unavailable, the following screen may appear.

7. Troubleshooting

The table below describes the most common faults when operating the charger. Contact Autel technical support if the fault encountered is not in this table.

Item	Problems	Solutions
1.	The charge session does not start as scheduled.	Do not insert the connector into your EV charging port before setting up a charging schedule for the first time. Insert the EV charging cable after the schedule is set up.
2.	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 (264 V), contact local power grid company.
3.	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.
4.	Ground fault	Ensure the charger is grounded correctly.
5.	Power failure	Ensure the switch to the circuit breaker is on.
6.	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 until it is within the operation temperature range.
7.	Residual current detected	Unplug the vehicle and plug in again. If the problem persists, contact customer support.
8.	Internet connection fails	Try to connect another device to the same Internet, verifying the Internet connection is working properly. If the problem persists, contact customer support.

8. Compliance

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

EN 62311:2008

EN IEC 62311:2020

EN IEC 61851-1:2019

IEC 61851-1:2017

EN 301 489-1 V2.2.3:2019

EN 301 489-3 V2.3.2:2023

EN 301 489-17 V3.3.1:2024

EN 301 489-52 V1.3.1:2024

EN IEC 61851-21-2:2021

EN 50470-1:2006

EN 50470-3:2006

EN 300 328 V2.2.2:2019

EN 300 330 V2.1.1:2017

EN 301 908-1 V15.2.1:2023

EN 301 908 -13 V13.2.1:2022

EN 301 511 V12.5.1:2017

EN 301 489-19 V2.2.1:2022

EN 300 220-2 V3.1.1:2025

EN 303 413 V1.2.1:2021

EN 300 440 V2.1.1:2017

EN 300 440 V2.2.1:2018

EN 301 893 V2.1.1:2017

NOTICE

This equipment has been tested and found to comply with the limits for an EN 300 440 v2.1.1 receiver Category 3. These limits are designed to provide reasonable protection against harmful interference in a residential installation. When placed in the vicinity of other device(s) radiating in the 2.4 GHz ISM band, this device will inadvertency trigger on. Please take appropriate measure to mitigate this eventuality.

SEVADIS
POWERING ELECTRIC VEHICLES

0330 058 7144
enquiries@sevadis.com
sevadis.com
Granville House, Unit E, The Heights Business Park,
Ibstone Rd, Stokenchurch High Wycombe, HP14 3BG