



PORTABLE AC EV CHARGER

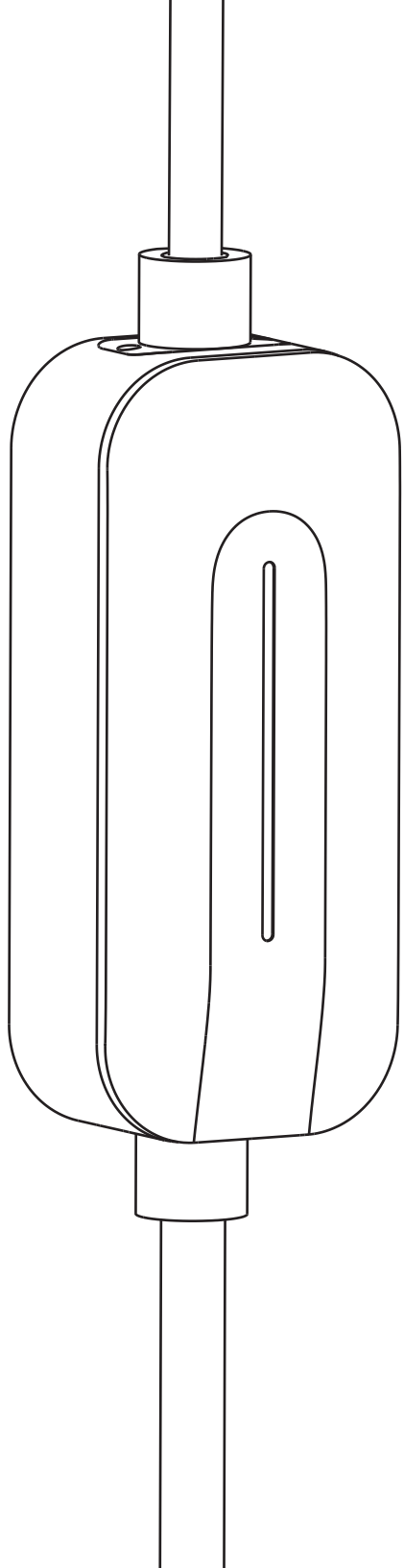
USER MANUAL



Website Support

U - V1.2

The illustrations are for reference only, and the actual product details shall be subject to the physical product.



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01 / Safety Instructions

WARNING

- This product is a dedicated electric vehicle (EV) charger designed for indoor and outdoor use. It is intended exclusively for charging electric vehicles.
 - Do not connect this charger to any non-EV equipment such as power tools, appliances, or other electronic devices. Doing so may cause equipment failure or pose a safety risk.
 - This charger must not be used to provide charging services to vehicles that are incompatible with local charging standards. Always verify that your vehicle meets the applicable regulatory requirements.
 - Ensure the charger operates strictly within the limits specified in the Technical Specifications Sheet. Exceeding the rated capacity may result in malfunction, damage, or personal injury.
-

IMPORTANT SAFETY INSTRUCTIONS

WARNING

- This manual contains important instructions for AC charger series that shall be followed during installation, operation and maintenance of the unit.
- Read all the instructions before using this product.
- Do not use the product when the charging cable has been damaged or frayed.
- Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- Do not put fingers into the electric vehicle connector.
- This device should be supervised when used around children.
- The whole installation should be operated by qualified professional electrician.
- Be careful! Any incorrect operation may cause life danger, injury or equipment damage. The manufacturer would refuse to accept any claim arising therefrom. Please make sure this instruction manual is fully understood and the specified conditions are met before any operations of the EV charger.
- Please do not operate under any circumstances that may cause electric leakage.
- Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.
- To reduce the risk of fire, connect only to a circuit provided with 20 A (3.5 kW) minimum branch circuit overcurrent protection in accordance with NFPA 70 and CSA C22.1.

SAVE THESE INSTRUCTIONS

01 / Safety Instructions

WARNING

Installation Requirements

- Install the charger in a location convenient for daily use and away from hazardous areas such as water sources, oil/gas lines, or flammable materials.
- Install in a cool, well-ventilated area with protection from sun and rain. Avoid direct sunlight, standing water, or high-humidity environments.
- The mounting surface must be capable of supporting the weight of the charger and accessories. Secure all wall-mounted components with appropriate anchors/screws, and ensure the unit remains upright and level after installation.
- Leave sufficient clearance around the charger for airflow, cable routing, and maintenance access.
- All installation and wiring work must comply with applicable local or national electrical codes and regulations.

Conditions of Use

- The enclosure must remain sealed to prevent liquid ingress (do not operate with covers open or gaskets damaged).
- Do not operate in the presence of explosive atmospheres, corrosive vapors, or substances that can degrade electrical insulation.
- Keep all cables at least 30 mm away from heat sources or heat-generating components.
- When not in use, stow the charging connector vertically at a height of approximately 0.6–1.2 m above the floor.

Storage Conditions

- Store indoors in a dry, well-ventilated environment.
- Ambient temperature: -35°C to $+80^{\circ}\text{C}$.
- 24-hour average temperature $\leq 35^{\circ}\text{C}$.
- Monthly average relative humidity $\leq 90\%$ (at 25°C).
- Ensure no surface condensation occurs.

Notice

- This product has been developed, manufactured, inspected, and certified in accordance with applicable safety standards. It meets all relevant safety and personal health requirements under normal operating conditions.
- Due to technical constraints or regional legal regulations, some models or accessories may not be available in all countries or regions.
For special requirements, please feel free to contact us for customized solutions.

01 / Safety Instructions

ⓘ Notice

- While this manual outlines core safety instructions, users are still required to comply with all local workplace safety laws and regulations at the installation or application site.
- This manual is intended for both end users and professional technicians.
Reserves the final right of interpretation for the content and instructions herein.

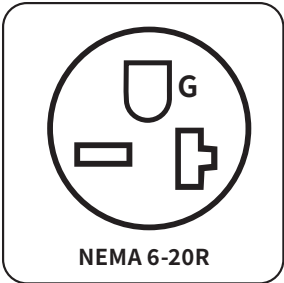
Circuit Breaker Specifications

In order to protect the safety of electricity, it is necessary to add circuit breakers to the input side of the product, the specifications are as follows:

Power	Current	Circuit Breaker/Socket/Plug	Note
3.5 kW	16 A (Max)	20 A (2P Circuit breaker) / 20 A Socket (minimum) /6 - 20P	Level 2

Electrical Safety Regulations

- The power cord supplies electricity. For 3.5 kW, use wire not smaller than 14 AWG.
- When installing the EV charger, it is recommended to equip a new power socket for the first time, if using the existing socket, a professional electrician should check the fastness of the internal wiring, oxidation of the electrodes, etc. and evaluate the conductivity, and it is strictly prohibited to use damaged, loose or worn power sockets.
- When using the plug version of the EV charger, the plug should be inserted vertically into the socket until it fits snugly without any gap, to ensure that the plug and the socket have solid contact.
- Regularly check the reliability of the plug and socket connection every month, if the plug is found to be loose and deformed, it needs to be stopped immediately and overhauled by a professional electrician.



Schematic Diagram of Power Socket

01 / Safety Instructions

GROUNDING INSTRUCTIONS:

- For a grounded, cord-connected product:
This product must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current, reducing the risk of electric shock. The product is equipped with a power cord that includes an equipment grounding conductor and a grounding plug. The plug must be inserted into a suitable outlet that is properly installed and grounded in accordance with all local codes and regulations.

WARNING- Risk of Electric Shock

Improper connection of the equipment grounding conductor may result in serious injury or electric shock. If you are uncertain about the grounding requirements, consult a qualified electrician before use. Do not modify the plug or attempt to force it into an incompatible outlet.

Power Supply System

To ensure safe and reliable performance:

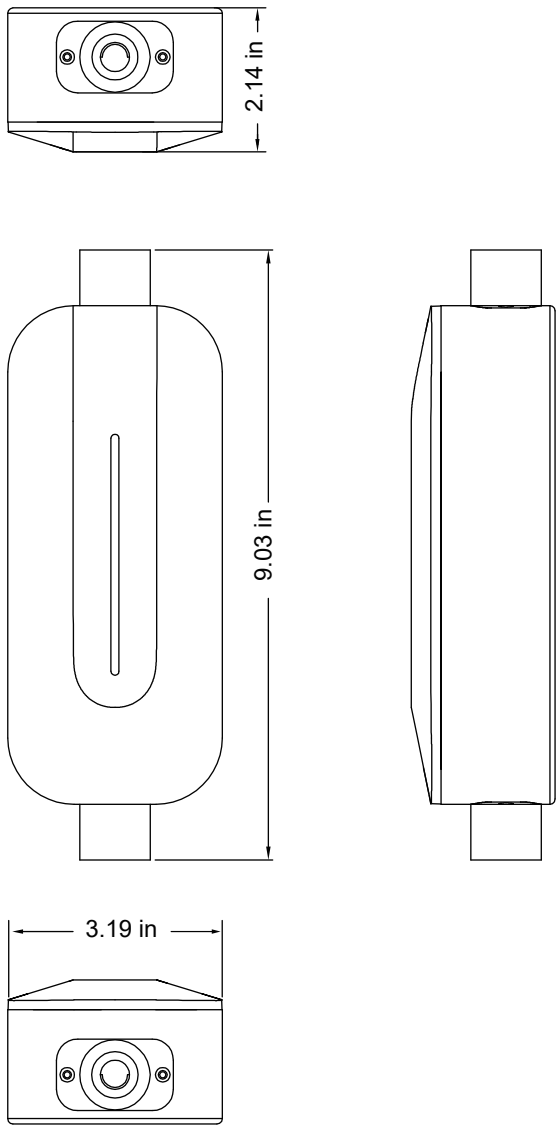
- The capacity of the power supply system must exceed the maximum rated power of the charger.
- For specific input voltage requirements and detailed electrical parameters, please refer to the Technical Specifications Sheet in this manual.

Notice

Always confirm compatibility with your local electrical infrastructure before installation. When in doubt, consult a licensed electrician.

02/Product Specifications_____

Product Dimensions



02/Product Specifications

Technical Specifications Sheet

Product Specifications	
Model	ZA01-U03K5 Series
Output Power	3.5 kW
Operating Current	16 A
Input Methods	NEMA 6 - 20P
Operating Voltage	240 Vac ($\pm 15\%$); L1 / L2 / PE
Operating Frequency	60 Hz
Basic Parameters	
Cable Length	25 ft (7.5 m)
Connector Type	Type 1 (SAE J1772) / NACS (Optional)
Indicator	3-Color LED
Mount	Portable
Charging Mode	Plug and Charge
Weight	< 6.17 pounds
Size	9.03 in $\times$ 3.19 in $\times$ 2.14 in
Protection Feature	
Over-voltage Protection	If the input voltage exceeds 120% of the rated value, the relay disconnects.
Low-voltage Protection	If the input voltage falls below 80% of the rated value, the relay disconnects.
Over-current Protection	If the output current exceeds the rated current by more than 2 A, the relay disconnects. Disconnect and reconnect power after the fault is cleared.
Over-temperature Protection ①	If the mainboard temperature reaches 221°F (105°C), the charger initiates current derating. The relay disconnects if the temperature exceeds 230°F (110°C).
Grounding Protection	The relay disconnects automatically if the protective earth (PE) conductor is not detected or becomes disconnected during charging.
Leakage Protection	The relay disconnects automatically if leakage current is detected.

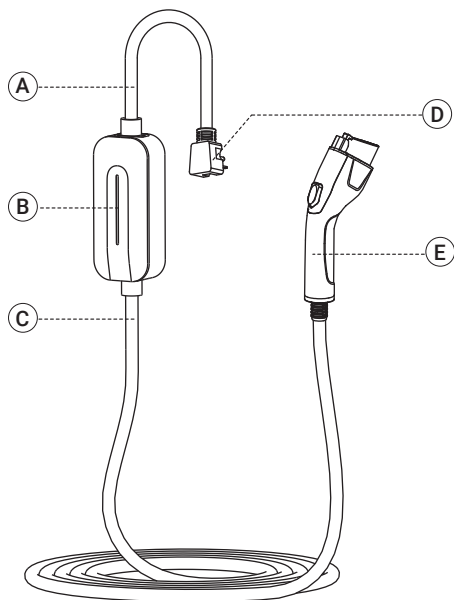
02/Product Specifications_____

Environment Characteristics	
Operating Temperature	-22 °F to +122 °F (-30 °C to +50 °C)
Storage Temperature	-31 °F to +176 °F (-35 °C to +80 °C)
Operating Humidity	5% to 95% RH
Operating Altitude	< 6561.7 ft (2000 m)
Protection Degree	TYPE 3R
Reliability	
MTBF	100,000 H
Warranty	2 Years ^②

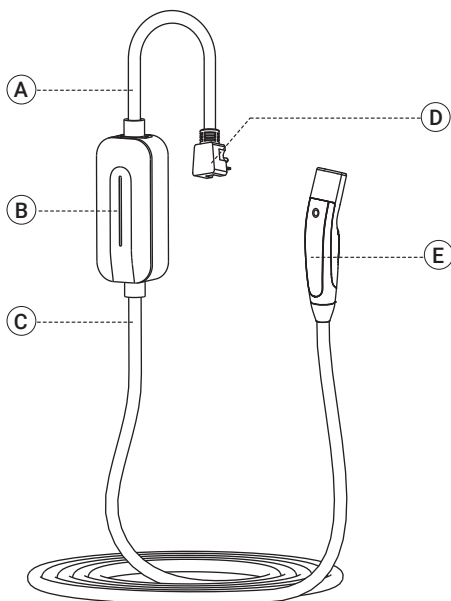
- ① When the surface temperature of the AC input plug reaches 131°F (55°C), the unit automatically implements power derating. When the surface temperature rises to 140°F (60°C), the electric vehicle charger will shut down completely.
- ② 2-Year Limited Warranty (Normal Use): This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by misuse, abuse, accidents, improper installation, unauthorized modification/repair, or normal cosmetic wear (e.g., scratches, scuffs, abrasion from dragging or rubbing). We may request photos/videos and serial number to help evaluate the issue.

03/ Product Installation

Product Component Introduction



SAE J1772 EV Charger Schematic



NACS EV Charger Schematic

Ⓐ. Input Cable

Ⓑ. LED Indicator Light

Ⓒ. Output Cable

Ⓓ. AC Plug

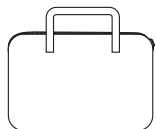
Ⓔ. EV Connector

*The diagrams are for reference only. For actual product details, please refer to the physical product.

03/ Product Installation ---

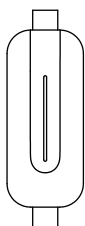
Packing List

Note: Please check the packing list to ensure that all the parts listed below are included.



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Handbag



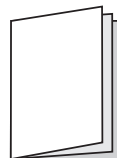
x1

AC Charger



x1

Certificate of
Conformity



x1

User Manual

04/Operation Guide

Indicator Light Description

Charging Status	Indicator Color	Indicator Status
Standby	 Blue	Always on
Plug-in	 Green	Always on
Charging	 Green	Flashing
CP Fault	 Red	Always on
Overvoltage/Undervoltage	 Red	Flashes once every 1 s
Ground Fault	 Red	Flashes once every 2 s
Overcurrent	 Red	Flashes once every 4 s
Leakage	 Purple	Flashes once every 1 s
Overtemperature	 Purple	Flashes once every 2 s

04/ Operation Guide

Charging Steps

Select charging mode for charging

 Plug and Charge



Plug and start charging.



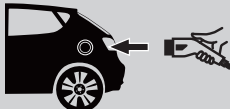
Charging Process

a.



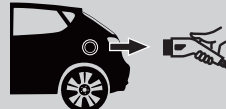
Open the car's charging port and make sure there are no objects in the charging port.

b.



Connect the EV charger's connector to the electric vehicle.

c.



Unlock on your car key, then pull out the charging latch.

Tips:

1. All operations must be completed before inserting the EV connector.
2. All buttons will lock after inserting the EV connector.
3. The NACS charging connector uses a 315M radio frequency module. Pressing the button at the head of the charging connector opens the vehicle's charging port door.

05/Troubleshooting and Maintenance

Troubleshooting

1. Unable to power on

- Check the power supply and cables to ensure they are undamaged and correctly connected, and that the power supply is functioning properly.
- If the issue cannot be resolved, please contact the service partner.

2. Unable to start charging

- Check the EV connector to ensure there are no foreign objects inside, the cable is undamaged, and there is good contact between the EV connector head and the socket.
- Check the unlock button to ensure it is locked, and that the vehicle settings are correct.

3. Incomplete charging or overcharging charging

- High temperatures can lead to reduced current or interrupted charging.
- Over voltage or under voltage may lead to interrupted charging.
- Poor grounding can result in product protection and incomplete charging.

4. Red LED always on – CP fault

- Please restart the device for charging.
- If the issue cannot be resolved, please contact the service partner.

5. Red LED flashes ones every 1 s – Overvoltage

- This indicates that the input voltage to the charger is higher than the limit of 288Vac (max).
- Contact an electrician to confirm if the supply voltage is normal.
- If the issue cannot be resolved, please contact the service partner.

05/Troubleshooting and Maintenance

6. Red LED flashes once every 1 s – Undervoltage

- This indicates that the input voltage to the charger is lower than the limit of 192Vac (min).
- Contact an electrician to confirm if the supply voltage is normal.
- Please confirm if the power supply load capacity is sufficient.
- If the issue cannot be resolved, please contact the service partner.

7. Red LED flashes once every 2 s – Ground fault

- Check if the ground wire status of the power supply socket is valid.

8. Red LED flashes once every 4 s – Overcurrent

- Please confirm if the vehicle charging current is within the rated range.
- If the issue cannot be resolved, please contact the service partner.

9. Purple LED flashes once every 1 s – Leakage

- Check for EV leakage.
- Check the power supply and cables to ensure that they are not damaged in any way and are properly connected.
- If you cannot resolve the problem, please contact a service partner.

10. Purple LED flashes once every 2 s – Overtemperature

- Stop charging and restart charging after 30 minutes.
- If the issue cannot be resolved, please contact the service partner.



Important matters:

- In order to protect your normal warranty service, please make sure that the tear-proof label of this product remains intact;
- The warranty period of this product is based on the date of transportation and delivery, if such date cannot be provided, the date of the product leaving the factory shall prevail;
- The original product and invoice are required to be presented during the warranty period.

05/Troubleshooting and Maintenance _____

Maintenance and Care

- Appearance and Connection Inspection
 1. Shell and the surrounding environment: check whether there are cracks, deformation, corrosion or discoloration of the shell, whether the installation base is loose; clean up surface dust, oil and debris (available dry cloth or neutral cleaner, avoid water).
 2. Charging connector and socket: check whether the connector is dirty, oxidized (anhydrous alcohol can be used to wipe the slight oxidized layer), whether there are foreign objects blocking the jack; ensure that the connector and the vehicle interface insertion and extraction is smooth, and the locking mechanism is not stuck.
 3. Cables and plugs: Check whether the power cord and charging cable are damaged, cracked or bitten by rats, whether the plug is loose and hot (no abnormal warming by touching), and whether the grounding wire is firm.
- If the EV charger needs to stop using for a long time, cut off the power supply, then store and organize the charging connector cable, cover the dust-proof cover of the connector, or insert the charging connector into the socket.

06/ Certification Statement _____

ISED Notice:

This device complies with Innovation, Science and Economic Development Canada's licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference; and
- (2) this device must accept any interference. Including interference that may cause undesired operation of the device.

CAN ICES-003 (A) / CAN NMB-003 (A)

Avis d' 'Innovation, Sciences et Développement

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage; et
- (2) l'utilisateur de l'appareil doit accepter le brouillage radioélectrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement. mauvais fonctionnement de l'appareil.

CAN ICES-003 (A) / CAN NMB-003 (A)

RF Exposure Radiation Exposure Statement:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

FCC Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement.
The device can be used in portable exposure condition without restriction.
The device can be used in mobile(min20cm) exposure condition.

06/ Certification Statement _____

FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Warning

Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled rolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.



Website Support



After-Sales Support:
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