Charge Amps **Luna**

User Manual

English

CHARGE AMPS

www.chargeamps.com

Respect the environment! Must not be discarded with household waste! This product contains electrical or electronic components that should be recycled. Leave the product for recycling at a designated location e.g. the local authority's recycling station.

Disposal of the product must comply with the local environmental laws and guidelines. The product consists of recyclable plastics and electronics, and should be recycled as specified for these materials.

CE

In conformity with the relevant EU directives.

Neglecting to follow and carry out the directions, instructions and safety precautions in this Installation Manual implies that any warranty provisions will be cancelled and that Charge Amps AB can reject any and all claims for compensation in connection with any injuries/damage or incidents – direct or indirect – that are a result of such negligence.

Charge Amps AB does not give any warranties as to the accuracy or completeness of this document and shall have no liability for the consequences of using such information. Charge Amps AB reserves the right to make changes to information published in this document without notice.
Visit www.chargeamps.com for the latest document releases.

1 Safety

WARNING: Read all instructions before installation!

- Improper use may create a risk of personal injury.
- The product must only be installed by a qualified electrician in accordance with the installation manual.
- National usage requirements and restrictions apply.
- Only use this product for charging compatible electric vehicles.
- Never use an adapter between the EV socket outlet and the charging cable.
- Cord extension sets are not allowed to be used.
- Inspect the product for visible damage before use.
- Never attempt to repair or use the product if it is damaged.
- Do not immerse the product in water, subject it to physical abuse or insert foreign objects into any part of the product.
- Never attempt to disassemble the product in any way.
- The owner is responsible for informing users of the compatibility of any charging point.

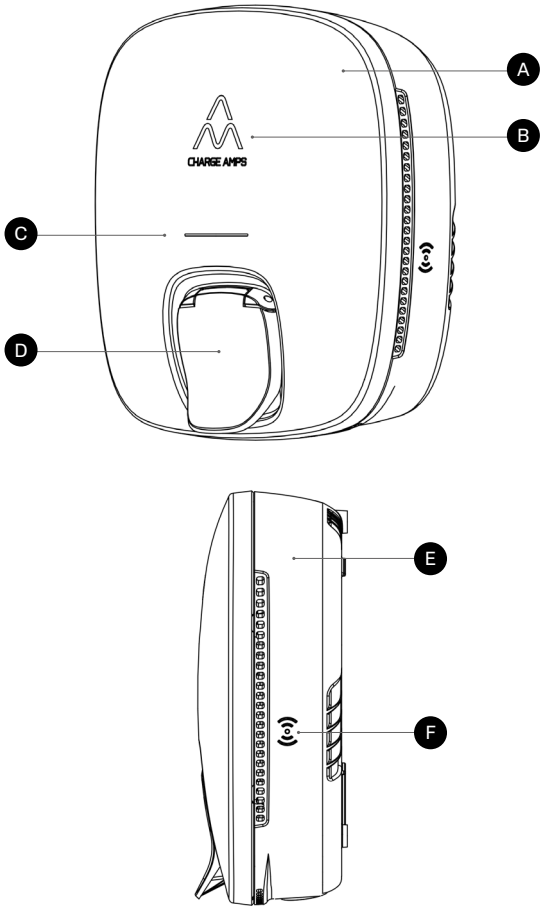
2 Technical data

Charging mode	Mode 3
EV power supply identifier	C
Metering	1 to 3 phase voltage, current and power
Socket	Type 2, 22 kW(1)
Rated voltage (U_n)	230/400 V
Rated insulation voltage (U_i)	250/400 V
Rated impulse withstand voltage (U_{imp})	4 kV
Rated frequency (f_n)	50 Hz
Rated current (I_n)	32 A
Rated diversity factor (RDF)	1 (can be lowered if used together with a load balancing functionality)
Dimensions (W x D x H)	210 x 80 x 220 mm
Characteristics of power supply and output	AC EV supply equipment connected to AC supply network, permanently connected
Assembly type	AEVCS
RFID	Type: ISO/IEC 14443 Typ A 13.56 MHz Mifare Range: 13.553 – 13.567 MHz Max output: 24 dBm
Bluetooth	Version: Bluetooth 5.0 (LE) and Bluetooth LE 5.3 certified Range: 2400 – 2480 MHz Max output: 19 dBm

Wi-Fi	Type: 802.11 b/g/n/ax Range: 2412 – 2484 MHz Max output: 20.5/20.0/19.0/19.0 dBm@802.11b/g/n/ax
Cellular networks communications	Type: LTE-FDD and GSM Supported bands: B3/B7/B8/B20/B28 Range: 703–915/1710–1785/2500–2570 MHz Max output: 25 dBm @LTE-FDD, 35 dBm @GSM. SIM-card: built-in
Communication protocol	OCPP 1.6J ISO 15118 hardware ready

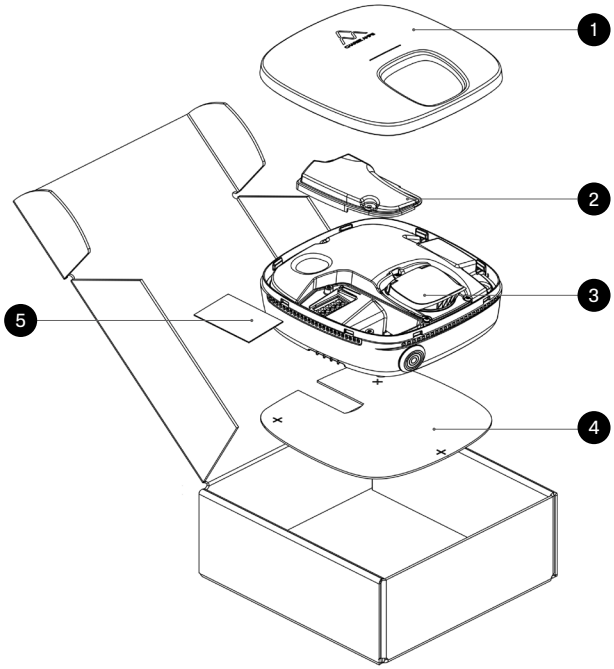
(1)The charging power is subject to external conditions, such as outside temperature, car battery state of charge, or if there's a load balancing function or charging schedule applied.

3 Product overview

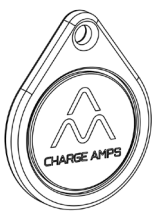


- A Front cover
- B Illuminated logotype
- C Status LED
- D EV socket
- E Charging unit
- F RFID reader

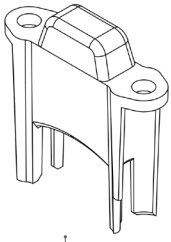
3.1 Package contents



5



RFID tag



Strain relief

2x long screw

2x short screw

1. Front cover
2. Installation lid
3. Charging unit
4. Drill template
5. Accessories bag:

- 1x RFID tag
- 1x Strain relief
- 2x long screw (PT40x30)
- 2x short screw (PT40x14)

Additional contents:

- Quick Guide
- Welcome letter

4 Use

4.1 Charging without RFID identification

1. Initiate charging by connecting the EV connector to the car. Lift the EV socket lid and connect the EV plug to the EV socket.
2. Stop charging by disconnecting the EV connector from the car and disconnecting the EV plug from the EV socket.

4.2 Add RFID tag

N.B: Make sure your installer has given you access to the Charge Amps Admin Portal to be able to manage RFID tags.

1. Log in to the Charge Amps Admin portal to add an RFID tag: https://my.charge.space/admin
2. Navigate to the charger page to turn on the RFID lock

4.3 Charging with RFID identification

1. Initiate charging by connecting the EV connector to the car. Lift the EV socket lid and connect the EV plug to the EV socket.
2. Briefly hold the RFID tag in front of the RFID reader to initiate charging.
   If no RFID tag has been verified during the 5 minutes time window, charging needs to be initiated remotely or reactivated by unplugging and reconnecting the EV connector.
3. Stop charging by disconnecting the EV connector from the car and disconnect the EV plug from the EV socket.

4.4 Cable lock

During charging, the cable lock is automatically activated.

If you wish to lock the cable permanently, log into your Charge Amps User portal to lock the cable:

- https://my.charge.space/userapp/

N.B: In case of power loss, an already locked cable will remain locked.

4.5 Cloud connectivity

Charge Amps Installer App and Charge Amps Cloud are available for Charge Amps Luna connected to Charge Amps as the cloud provider.

Charge Amps **App**

Please download Charge Amps App, available in App store and Google Play, for full control, adjusting settings and enabling smart charging and scheduling.

GET IT ON Google Play

Download on the App Store

Charge Amps **Cloud**

Please create an account in the Charge Amps Cloud to configure, control and manage your charger via our web interface.

My charge space →

https://my.charge.space/

Full product information

Visit www.chargeamps.com for Charge Amps Luna Installation Manual, Charge Amps Luna User Manual and other product documentation.

Full product information

https://www.chargeamps.com/product/charge-amps-luna

4.6 Earth fault detection

Charge Amps Luna has a built-in Residual Current Device (RCD) for detection of earth fault.

4.6.1 Reset the internal RCD

An earth fault is indicated by a steady red light on the status LED.

Reset the internal RCD by:

1. Disconnect the charging cable from Charge Amps Luna.
2. A steady green light will show on the Status LED which indicates that the RCD has been reset.

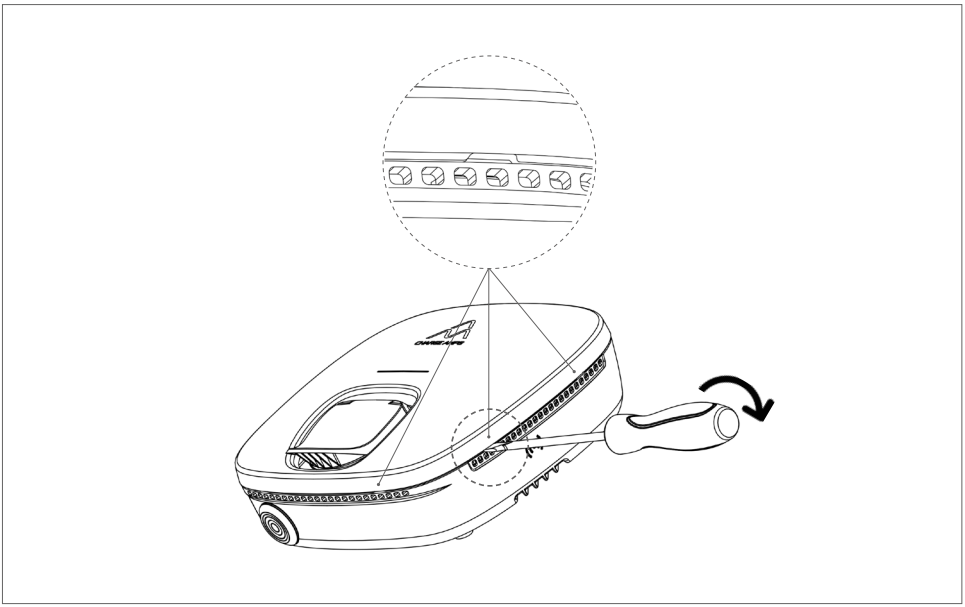
4.6.2 Test the internal RCD

The built-in RCD function of Charge Amps Luna needs to be tested twice a year by following the steps below.

Recommended tools:

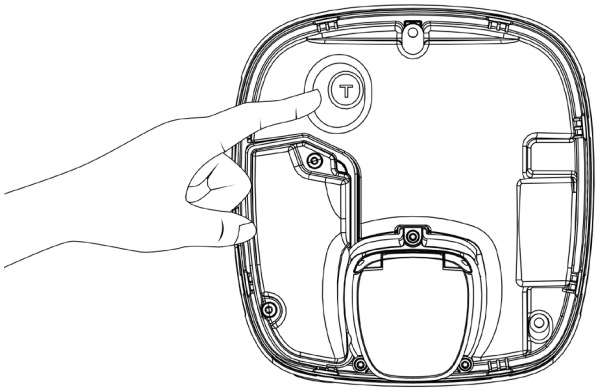
- Flat screwdriver to open the Front cover
- A charging cable
- Access to an EV simulator, an EV charging station tester or an electric vehicle .

1. Use the flat screwdriver to carefully bend the Front cover open.



2. Remove the front cover.

3. Connect the electric vehicle, or test tool, to Charge Amps Luna using the charging cable.
4. If RFID authentication is enabled, briefly hold the RFID tag in front of the RFID reader to initiate a charging session.
5. When the charging session has started, press the test button marked "T" for three seconds to test the RCD.

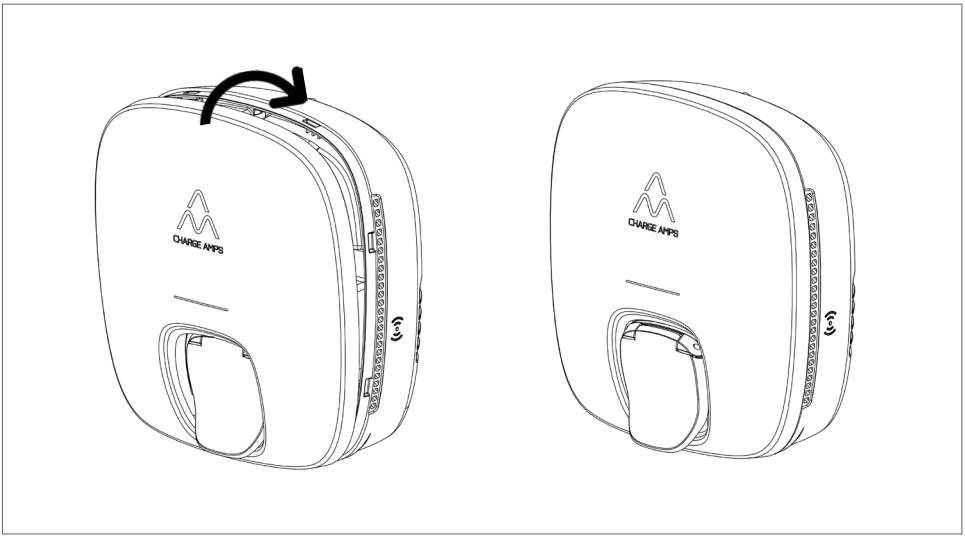


6. Charging will be aborted and a steady red light will show on the Status LED which indicates a ground fault.

WARNING! If the result of the testing diverges from what is stated in these instruction, contact your installer for support.

7. Reset the RCD by disconnecting the charging cable from Charge Amps Luna.
8. A steady green light will show on the Status LED which indicates the RCD has been reset.

9. Reassemble Charge Amps Luna by carefully pressing the Front cover in place.



4.7 LED indications

4.7.1 General

Status	Status LED
Starting up	Green pulsating light
Ready for charging	Green steady light
Charging	Blue pulsating light
Charging complete	Yellow steady light
Charging paused by EV	Yellow steady light
Charging paused by charger	Blue steady light

4.7.2 RFID tag verification

Status	Status LED
Waiting for RFID tag verification	White pulsating light
Waiting for charging cable	White pulsating light
Processing RFID tag	White flashing light
RFID tag approved	Green steady light
RFID tag not approved	Red pulsating light

4.7.3 Other

Status	Status LED
Error	Red flashing light
Earth fault detected	Red steady light
EV socket unavailable for use	No light
Firmware update	Yellow slow pulsating light

5 Maintenance

N.B: Never spray water or any other liquid directly on the product.

- Visually check that the EV socket-outlet is free from damage.
- The outside of the product must be regularly wiped with a clean, dry cloth to remove dirt and dust.
- Do not use detergent to clean any of the product's components.

6 Product support and service

If you have any questions or problems with the product, support is always available. To find answers to your questions most quickly: Read through the Installation Manual or User Manual to check whether your questions are answered there.

If your question is not answered, please:

1. Contact your supplier or cloud provider.
2. If you need service or repair, start by contacting the supplier from whom you purchased the product.
3. For additional information, visit our Help Center at: www.chargeamps.com/support.

7 Warranty

As warranty terms may differ from market to market, we recommend that you contact your supplier regarding the warranty terms.

www.chargeamps.com

Charge Amps AB (publ)
Frösundaleden 2B, 8th floor
SE–169 75 Solna, Sweden

Doc. Nr: 131591
Rev: 02