

Charge Amps Dawn



User Manual

English



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



Approved in conformity with the relevant EU directives and UK legislation.

Neglecting to follow and carry out the directions, instructions and safety precautions in this User 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.

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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 in any part of the product.
- Never attempt to disassemble the product in any way.

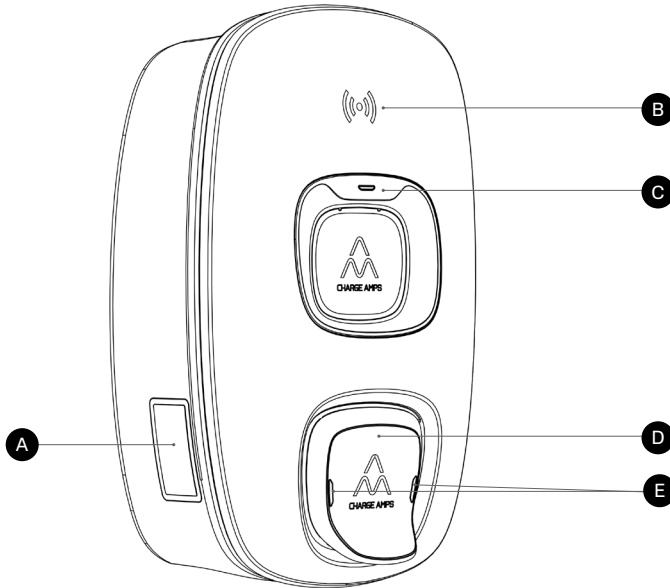
2 Technical data

Charging mode	Mode 3
EV power supply identifier	
Metering	MID certified active electrical energy meter
Socket	Type 2, 22 kW
Rated voltage (Un)	230/400 V
Rated insulation voltage (Ui)	250/400 V
Rated impulse withstand voltage (Uimp)	4 kV
Rated frequency (fn)	50 Hz
Rated current (In)	32 A
Rated diversity factor (RDF)	1 (can be lowered if used together with a load balancing functionality)
Dimensions (W x D x H)	250 x 145 x 380 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 13.56MHz Mifare Range: 13.553 – 13.567 MHz Max output: 24 dBm
Bluetooth	Type: Class 2 Version: v4.2 Range: 2400 – 2500 MHz Max output: 4 dBm

Wi-Fi	Type: 802.11 b/g/n Range: 2400 – 2500 MHz Max output: 17.5/14/12.5 dBm@802.11 b/g/n
Cellular networks communication	Type: LTE-M, eMTC* Supported LTE-M bands: B2, B3, B4, B8, B12, and B20. Range: 699 – 960 / 1710 – 2155 MHz Max output: 35 dBm@GSM, 28 dBm@LTE SIM card: built-in

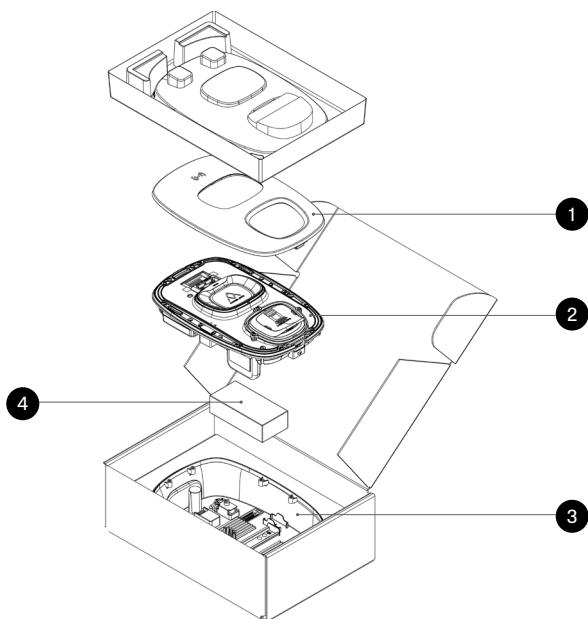
*Support for additional cellular standards will be available through OTA updates in later releases.

3 Product Overview

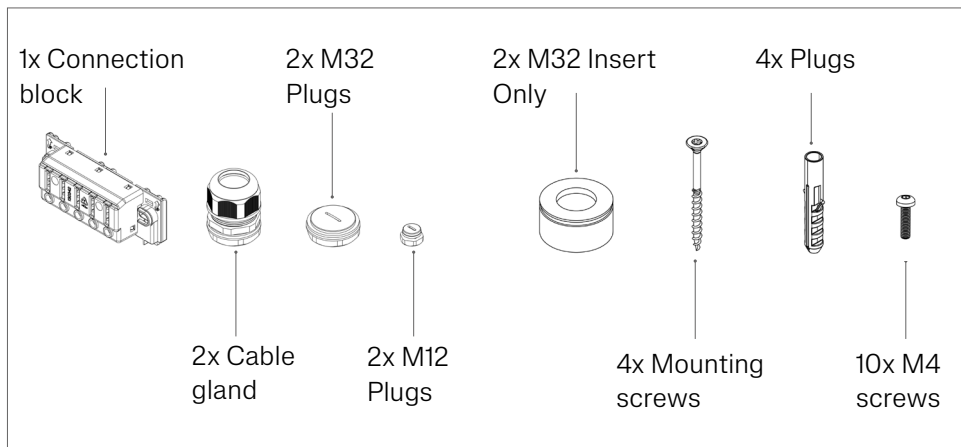


- A** MID display
- B** RFID reader
- C** RFID light
- D** EV socket
- E** Socket lights

3.1 Package contents



- ① Front Cover
- ② Charging Unit
- ③ Back Plate

4 Accessories:**Additional contents:**

- 1 x RFID tag
- Quick Guide User
- Welcome letter

4 Use

4.1 Add RFID tag

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

Add RFID tag using the Charge Amps cloud service:

<https://my.charge.space/admin>

4.2 Start and stop 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 disconnect the EV plug from the EV socket.

4.3 Start and stop 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.

4.5 Cloud connectivity

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

Charge Amps App

Please download Charge Amps App for full control, adjusting settings and enabling smart charging and scheduling.



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/userapp>

Full product information

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



Product information →

<https://www.chargeamps.com/product/charge-amps-dawn/>

4.6 MID display



Overview of the total energy (kWh) imported using the Charge Amps Dawn.

IMP/kWh: 1000

Impulses per kWh

S/N:
ABC0123456789

MID serial number

LR-SW:
2.2
CRC:
43ECD8A2

Legal software version and CRC

LNR-SW:
3.3
CRC:
66585487

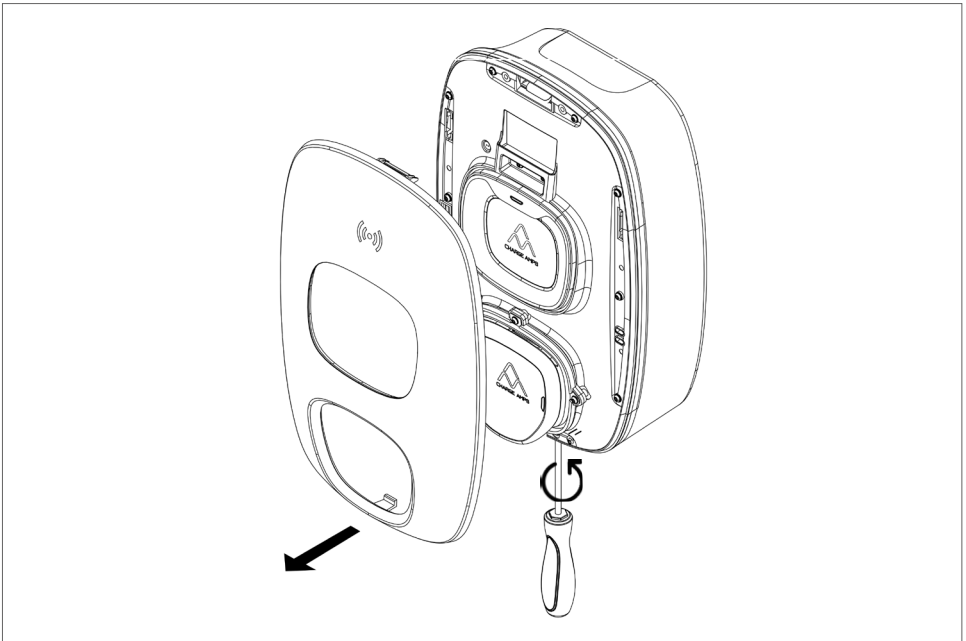
Non-legal software version and CRC

4.7 Reset the MCB

If the MCB is installed internally of Charge Amps Dawn and the MCB is tripped, reset the MCB by following the steps below.

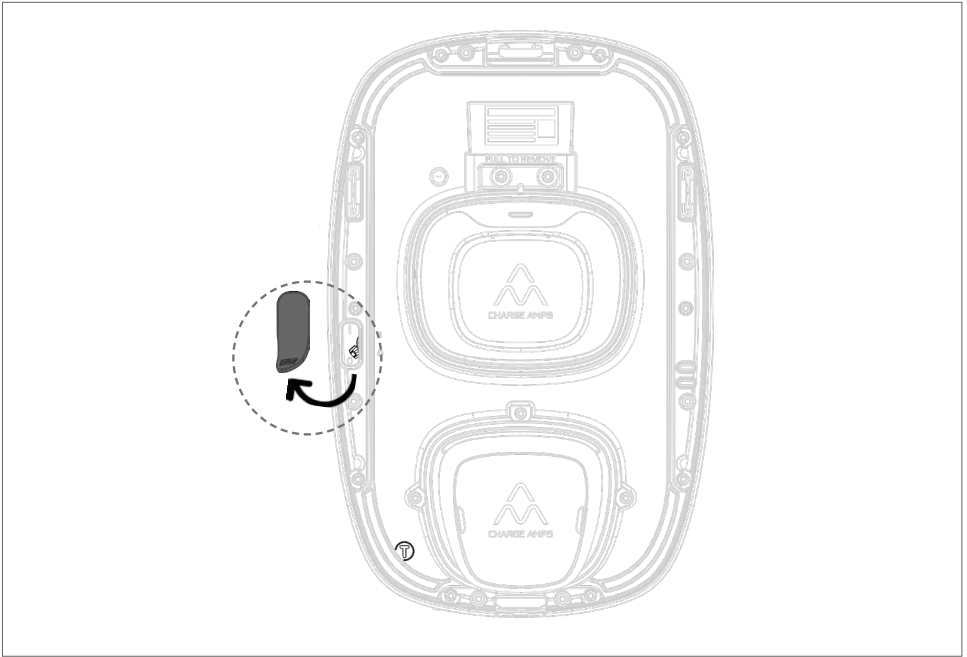
Recommended tools:

- A Torx 25 to unscrew the front cover
1. Using a Torx 25, untighten the lock screw by turning it counterclockwise until the front cover slightly releases from the bottom. Do not unscrew the lock screw completely.

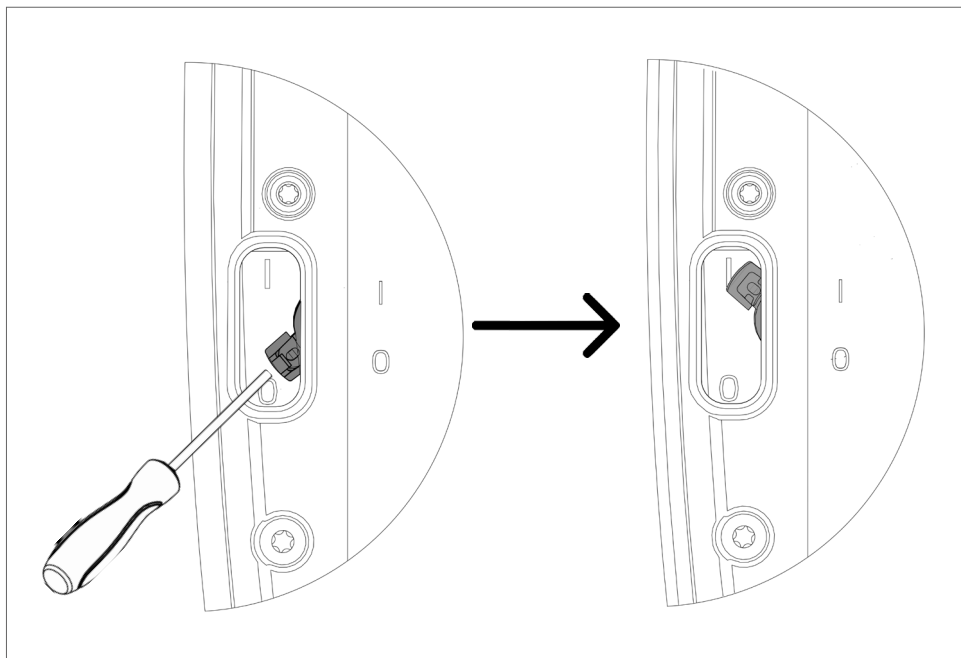


2. Remove the front cover by a pull from the bottom.

3. Remove the rubber cap.



4. Turn the switch to an upright position using a screwdriver.

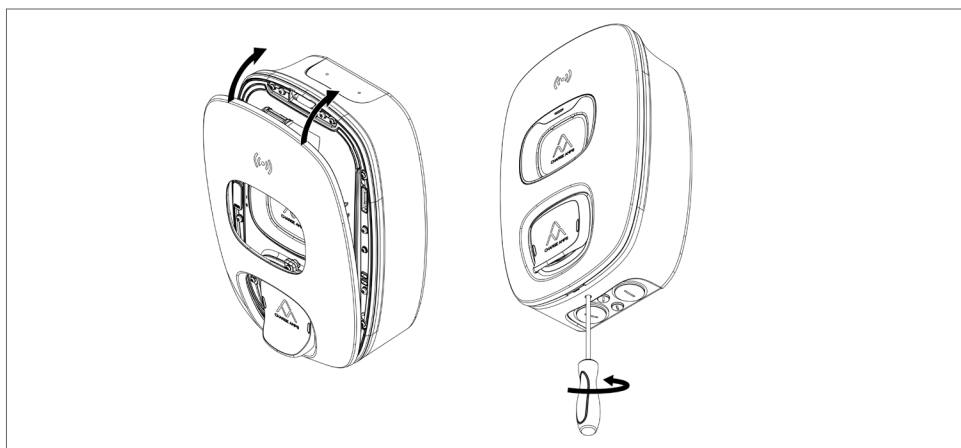


- Put the rubber cap back in place.



- Reassemble Charge Amps Down by inserting the front cover bottom flange and rotate the cover in place. Secure in place by tightening the front cover lock screw using Torx 25.

N.B. Use a max. torque of 2 Nm when tightening the screw.



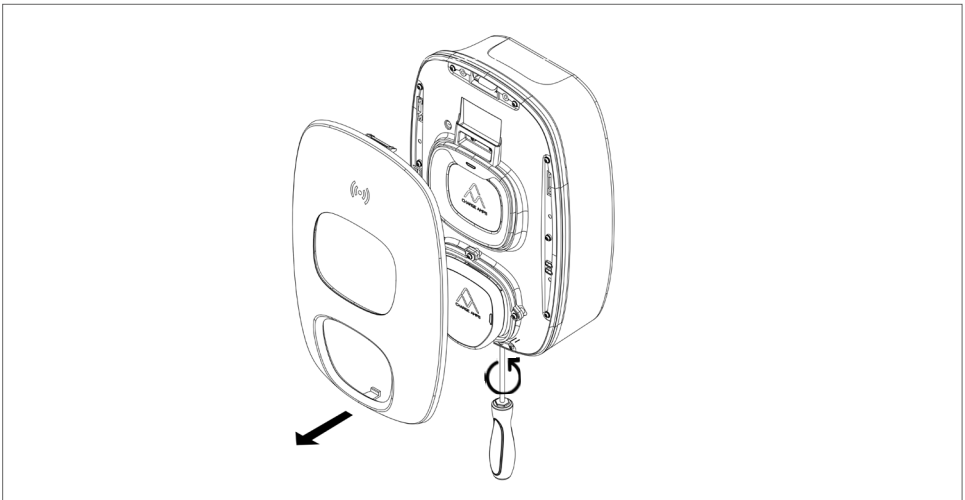
4.8 Detect earth fault and test the RCD

The built-in RCD function of Charge Amps Dawn needs to be tested twice a year. An earth fault is indicated by a steady red light on the socket lights and the RFID lights. Test and reset the built-in RCD function by following the steps below.

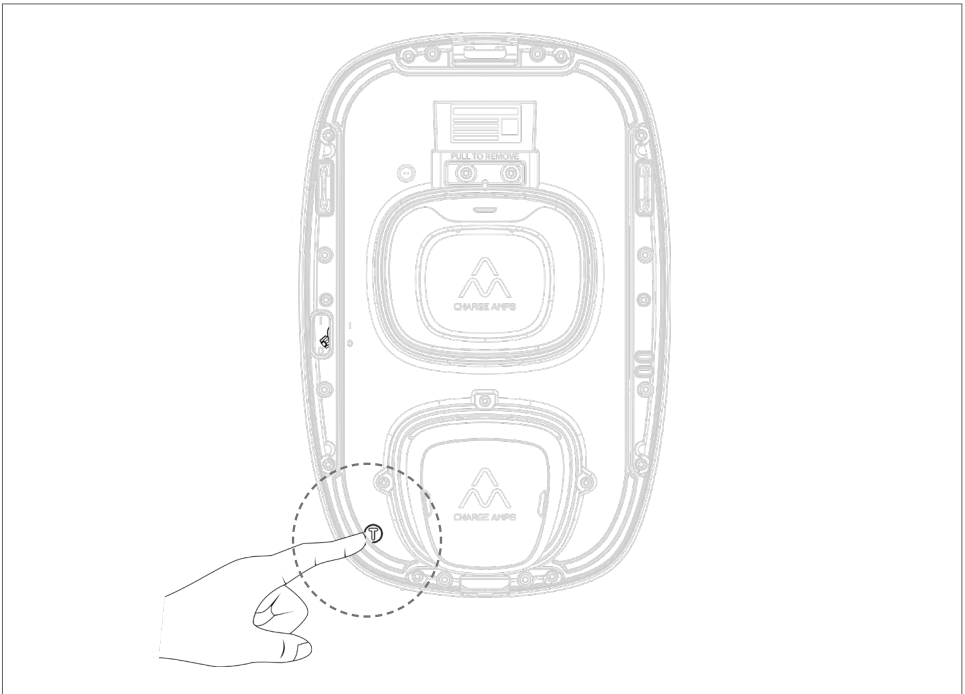
Recommended tools:

- A Torx 25 to unscrew the front cover.
- A charging cable.
- Access to an electric vehicle to start a charging session.

1. Using a Torx 25, untighten the lock screw by turning it counterclockwise until the front cover slightly releases from the bottom. Do not unscrew the lock screw completely.
2. Remove the front cover by a pull from the bottom.



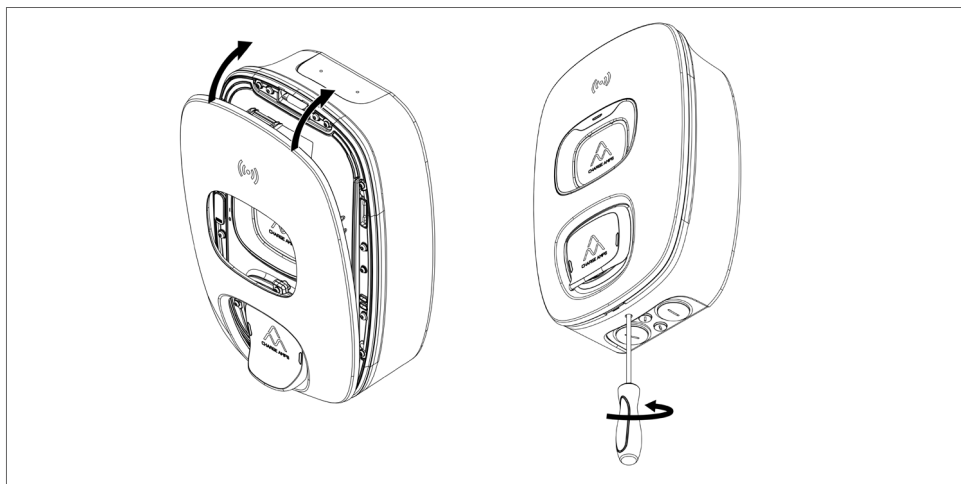
3. Connect the electric vehicle to Charge Amps Dawn using the charging cable.
4. If RFID authentication is enabled, briefly hold the RFID tag in front of the RFID reader to initiate a charging session.
5. When the charging session has started, hold your finger on the test button marked "T" for three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



6. Charging will be aborted and a steady red light will show on the socket lights which indicates a ground fault.
7. Reset the RCD by disconnecting the charging cable from Charge Amps Dawn.

8. A steady green light will show on the socket lights which indicates the RCD has been reset.
9. Reassemble Charge Amps Down by inserting the front cover bottom flange and rotate the cover in place. Secure in place by tightening the front cover lock screw using Torx 25.

N.B. Use a max. torque of 2 Nm when tightening the screw.



4.9 LED indications

4.9.1 General

Status	Socket light	RFID light
Ready for charging	Green light	Green light
Charging	Blue pulsating light	No light
Charging complete	Yellow light	No light

4.9.2 RFID tag verification

Status	Socket light	RFID light
Waiting for RFID tag verification	-	White short pulsating light
Processing RFID tag	-	White pulsating light
RFID tag approved	-	Green pulsating light
RFID tag not approved	-	Red short pulsating light

4.9.3 Other

Status	Socket light	RFID light
Error	Red short pulsating light	Red short pulsating light
Earth fault detected	Steady red light	Steady red light
EV socket unavailable for use	No light	No light
Firmware update	Yellow pulsating light	Yellow pulsating light

5 Maintenance

WARNING! Never spray water or any other liquid directly on the product.

- Visually check that the EV connector 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 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 User Manual to check whether your questions are answered there.

1. If your question is not answered in the User Manual, please contact support.
2. If you need service or repair, start by contacting the supplier from whom you purchased the product.
3. For additional information, visit 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.

chargeamps.com

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