Charge Amps **Dawn**

User Manual

English

Charge Amps Dawn 130297
Charge Amps Dawn Professional 131595
Charge Amps Dawn Base 131391

CHARGE AMPS

www.chargeamps.com

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.

CE

In conformity with the relevant EU directives.

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.

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.
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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.
- 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	
Metering	MID certified active electrical energy meter
Socket	Type 2, 22 kW(1)
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(2)
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

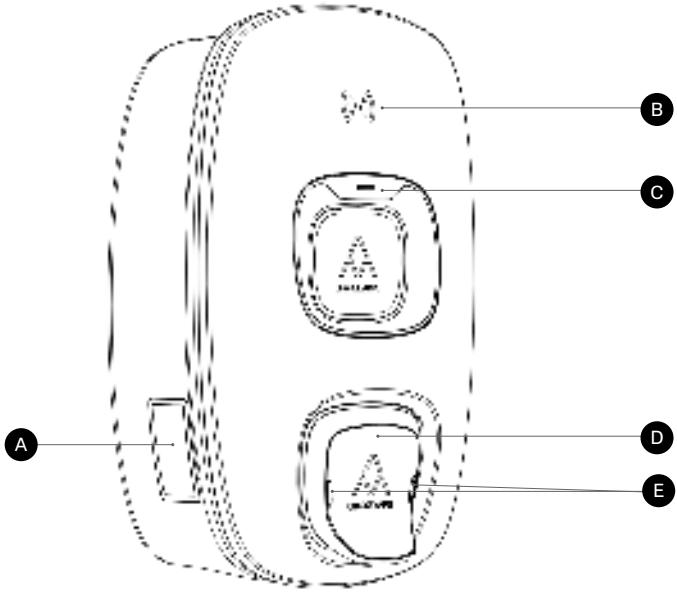
Wi-Fi	Type: 802.11 b/g/n Range: 2400 – 2500 MHz Max output: 17.5/14/12.5 dBm@802.11 b/g/n
LAN** (Ethernet 10Base-T/100Base-TX)	Cat5e & RJ45 (max. 30 mm)
Cellular networks communication	Type: LTE-M, eMTC Supported LTE-M bands: B3, B8 and B20. Range: 699 – 960 / 1710 – 2155 MHz Max output: 28 dBm @LTE-M SIM card: built-in

(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.

(2)For daisy chaining, the incoming current can be up to 63 A. See chapter 4.4 in Charge Amps Luna Installation Manual for more information.

(3)Some models only.

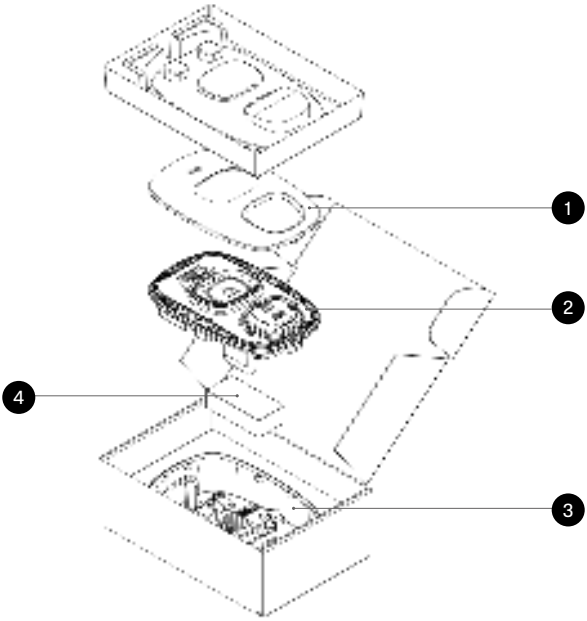
3 Product overview



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

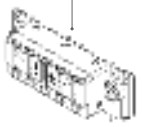
3.1 Package contents

Charge Amps Dawn comes in two versions. What is included in each version is described in the table on next page:



4

1x Connection block



2x M32 Plugs

1x M12 cable gland*

2x M32 Insert Only

2x M32 cable gland

2x M12 Plugs

10x M4 screws

*Only for Charge Amps Dawn Professional 131596

Charge Amps Dawn 130297*	Charge Amps Dawn Professional 131595
❶ Front cover	Front cover
❷ Charging unit	Charging unit
❸ Back plate	Back plate
❹ Accessories:	Accessories:
• 1x Connection block	• 1x Connection block**
• 2x Cable glands	• 2x M32 cable glands • 1x M12 cable gland
• 2x M32 plugs	• 2x M32 plugs
• 2x M12 plugs	• 2x M12 plugs
• 2x M32 insert only	• 2x M32 insert only
• 10x M4 screws	• 8x M4 screws
	MCB**
	Terminal block**
	LAN module**

*Charge Amps Dawn with product number 130297 requires the Installation Kit described in chapter 3.2 in Charge Amps Dawn Installation Manual.

**For Charge Amps Dawn Professional with product number 131595, the connection block, MCB, Terminal block and LAN module comes pre-installed.

Additional contents

Charge Amps Dawn 130297	Charge Amps Dawn Professional 131595
1x RFID tag	1x RFID tag
Quick Guide	Quick Guide
Welcome letter	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.

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.

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 Dawn Installation Manual, Charge Amps Dawn User Manual and other product documentation.

Product information →

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

4.5 MID display

	Overview of the total energy (kWh) imported using the Charge Amps Dawn.
imp/kWh: 1000	Impulses per kWh
S/N: AACC0123456789	MID serial number
LR-SW: 2.2 CRC: 43CC0A02	Legal software version and CRC
NR-SW: 3.3 CRC: 66585407	Non-legal software version and CRC

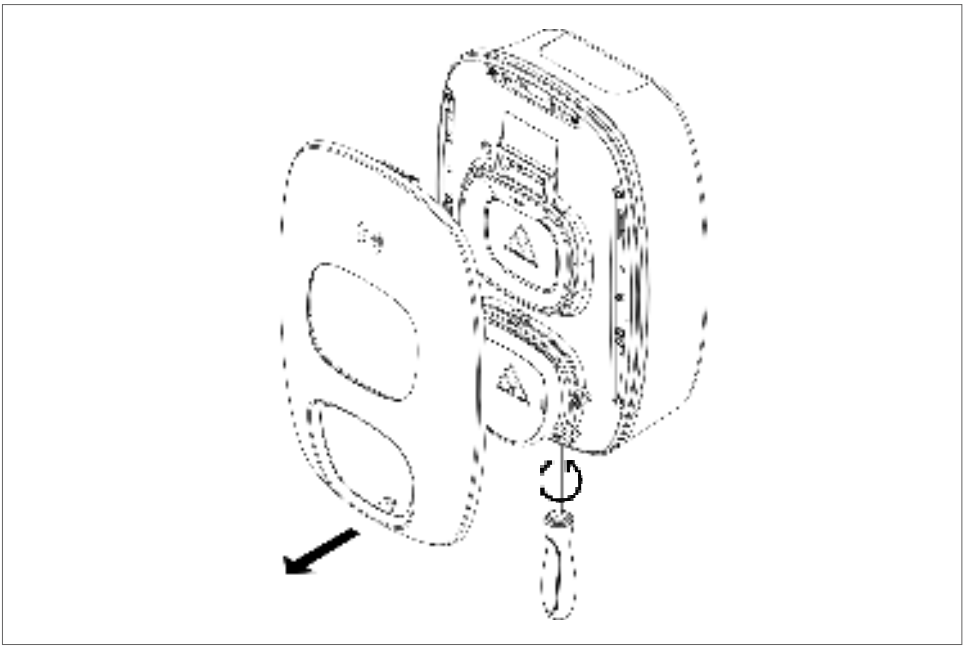
4.6 Reset the MCB

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

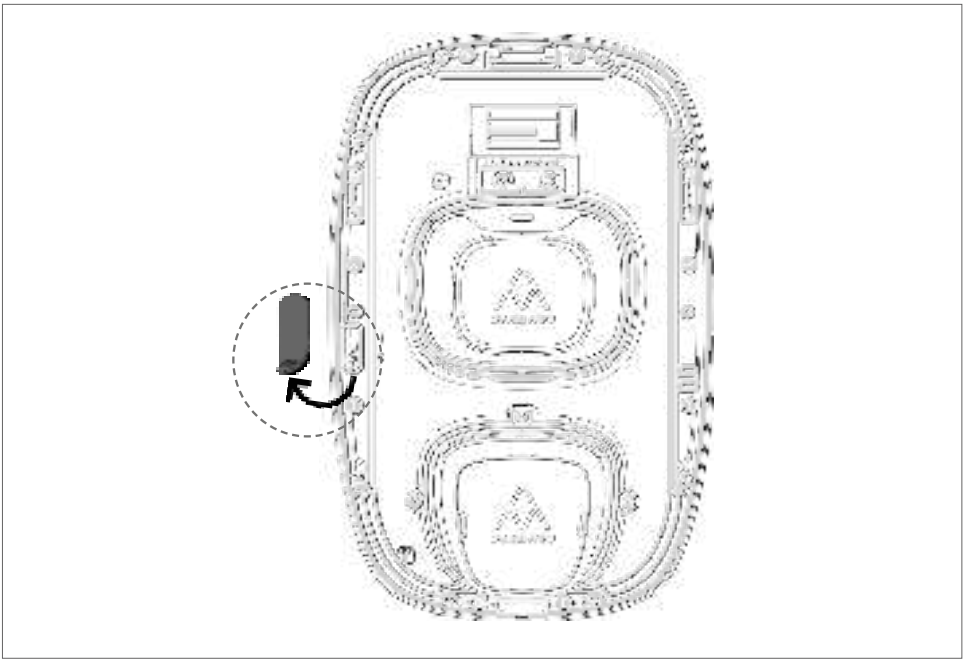
Recommended tools:

- A Torx 25 to unscrew the front cover

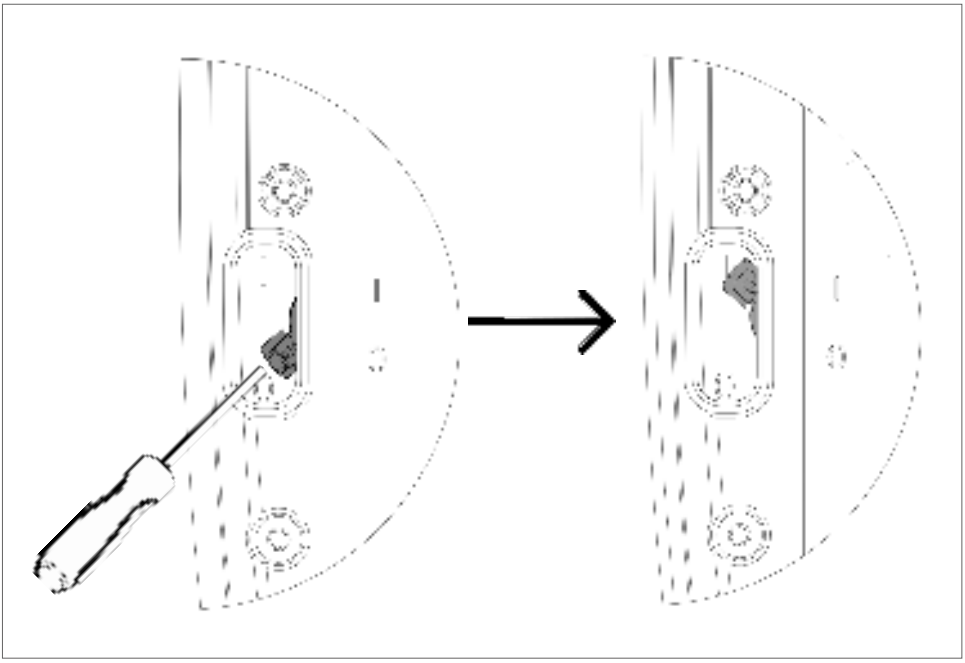
1. Using a Torx 25, untighten the lock screw by turning it counterclockwise until the front cover slightly releases from the bottom. Do not unscrew the lock screw completely.



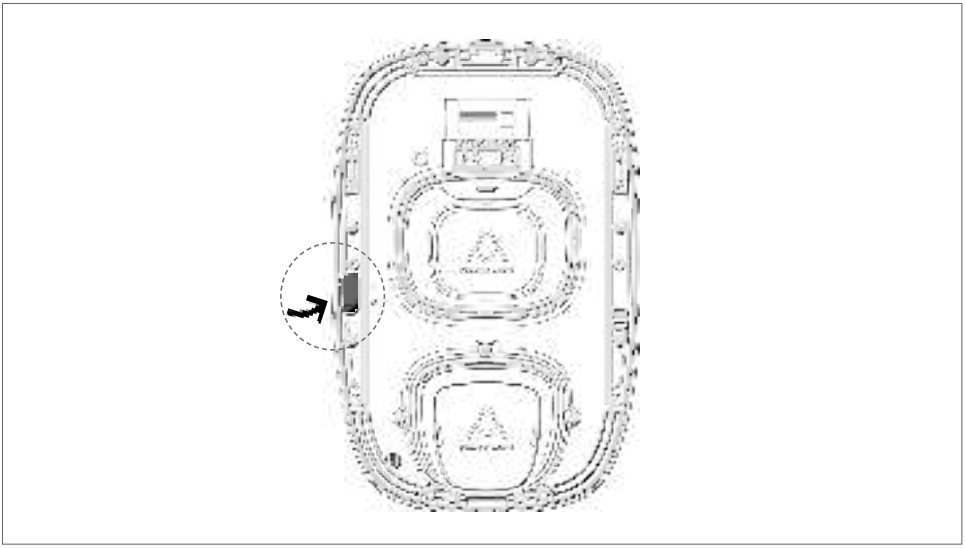
2. Remove the front cover by a pull from the bottom.
3. Remove the rubber cap.



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

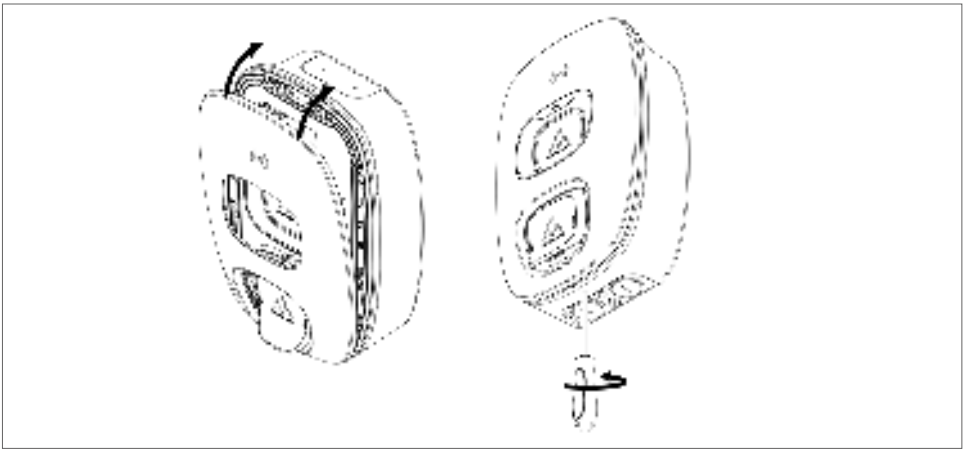


5. Put the rubber cap back in place.



6. Reassemble Charge Amps Dawn 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.



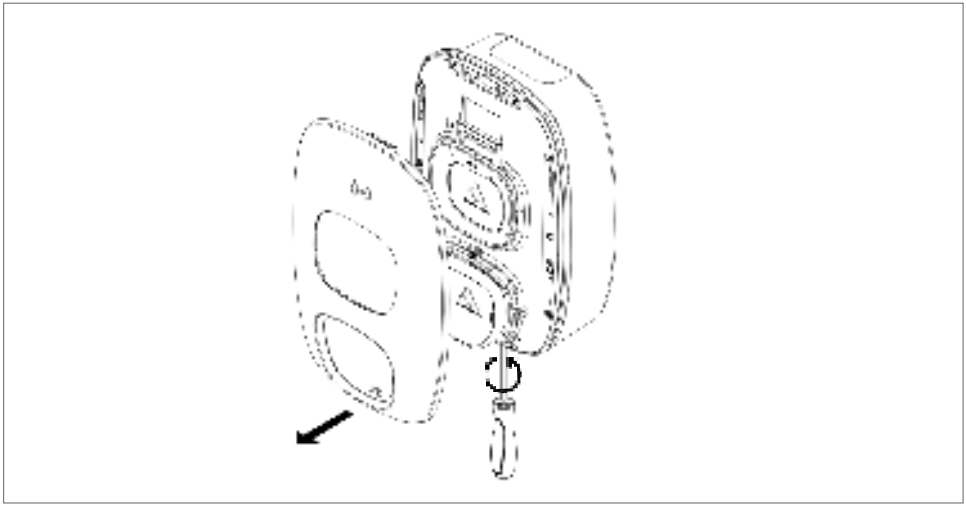
4.7 Test the built-in RCD

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:

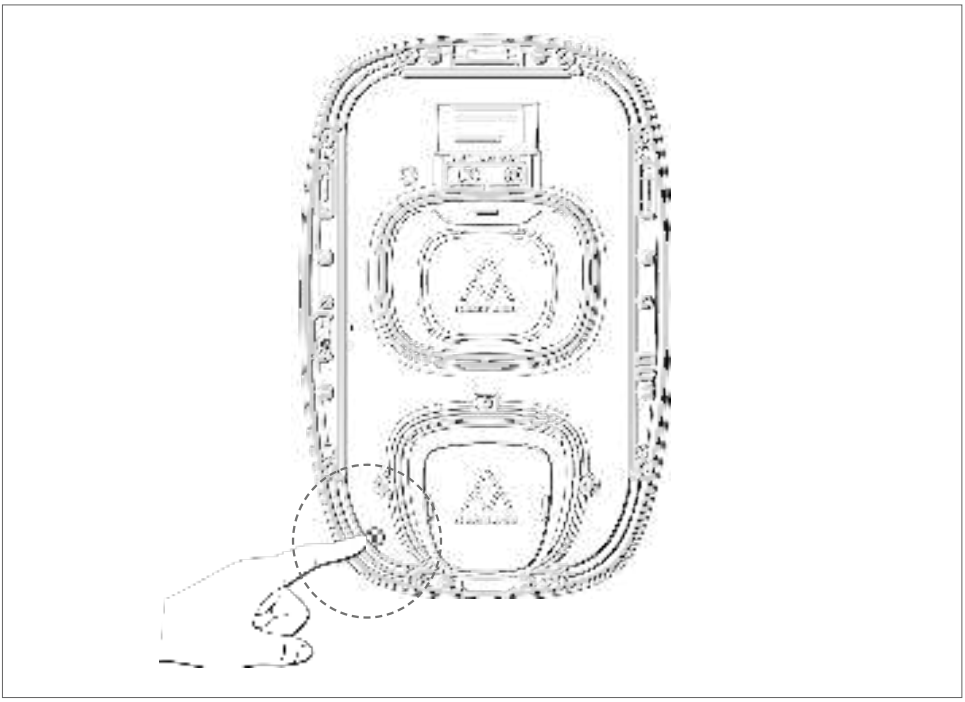
- A Torx 25 to unscrew the front cover.
- A charging cable.
- Access to an electric vehicle to start a charging session.

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.

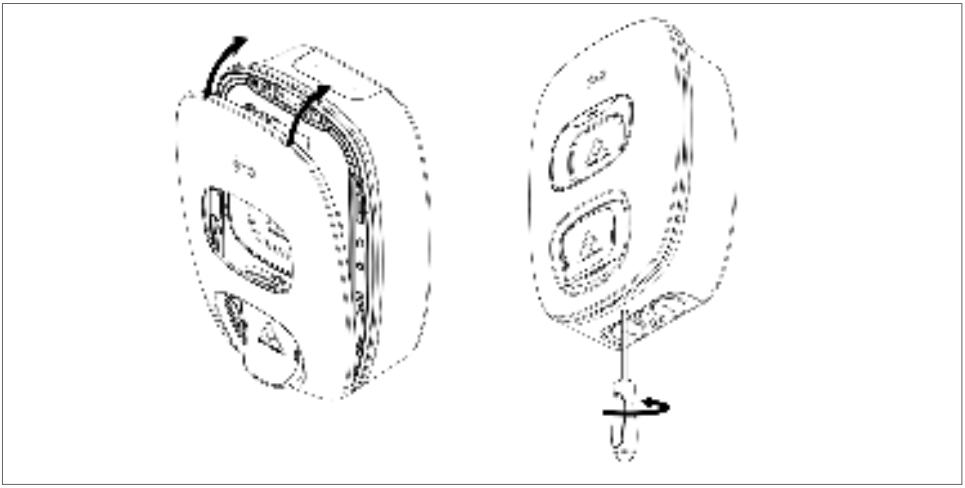
4. If RFID authentication is enabled, briefly hold the RFID tag in front of the RFID reader to initiate a charging session.
5. Make sure that the EV is charging, and that the socket lights are pulsating blue.
6. When the charging session has started, hold your finger on the test button marked "T" for three seconds to test the RCD.



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

9. A steady green light will show on the socket lights which indicates the RCD has been reset.
10. Reassemble Charge Amps Dawn 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 LED indications

4.8.1 General

Status	Socket light	RFID light
Ready for charging	Green steady light	Green steady light
Charging	Blue pulsating light	No light
Charging complete	Yellow steady light	No light
Charging paused by EV	Yellow steady light	No light
Charging paused by charger	Blue steady light	No light

4.8.2 RFID tag verification

Status	Socket light	RFID light
Waiting for RFID tag verification	-	White pulsating light
Waiting for charging cable	White pulsating light	-
Processing RFID tag	-	White short pulsating light
RFID tag approved	-	Steady green light
RFID tag not approved	-	Red short pulsating light

4.8.3 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

5.1 Regular maintenance

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

- Visually check that the EV socket-outlet it 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.

5.2 Preventative maintenance

N.B: Preventative maintenance should be performed by a qualified electrician once or twice each year to check that Charge Amps Dawn is in good condition.

- Remove the front cover and charging unit and make a visual check of the cable connections.
- Test the internal RCD (twice a year). See the instructions for how to test and reset the internal RCD in this User Manual. .

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 or Installation 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 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

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