Eaton Green Motion DC 44/66 EV charger

Quick start guide

Prior to installation, you are required to download **(www.eaton.com/greenmotiondc44_66)**, read and understand the step-by-step instructions from the latest installation and user manuals.

Never turn on equipment when there is any evidence of fire or structural damage.

The Green Motion DC 44/66 EV charger must be installed only by professional and qualified personnel

1. Preparation and mounting phases

Instructions

- The unit is intended for indoor or outdoor installation.
- Operation of the unit is recommended to be in the temperature range -25 °C to +45 °C.
- The unit must be transported and stored in indoor locations in the temperature range -25 °C to +45 °C.
- The unit must be used and stored in locations with relative humidity below 95 %.
- The unit must be used at an altitude not exceeding 2000 m above sea level.
- The unit must be used in locations free from acids, gases or other corrosive substances.
- Do not install the unit in areas where highly flammable substances are present.
- In case of missing accessories, contact your Eaton technical support representative.

Package contents:

- Green Motion DC 44/66 EV charger,
- Hex socket screw plug (Bossard 1038583),
- Quick start guide,
- Safety guidelines.

Installation checklist for Eaton Green Motion chargers

- Please visit the link or scan the QR code (Figure 2) to access the installation checklist form: https://content.eaton.com/en-gb-installation-checklist-ev-chargers

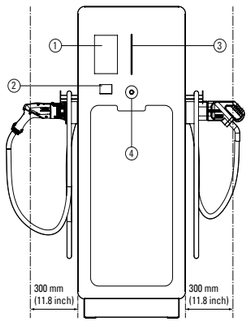
Positioning the Green Motion DC 44/66 EV charger

- Keep at least 300 mm of free space from the left- and right-hand sides of the unit to allow for adequate air circulation (see Figure 1).
- Ensure easy access to the controls and connections.
- Eaton recommends installing the unit at the front and centre of the parking space it services. Each EV charger should serve only one parking space.
- The unit should be lifted with the lifting slings using the two eye bolts on the sides of the unit (see Figure 3). The screen and housing painting should be protected during the operation. Once the unit is mounted on the floor, replace the eye bolts with the provided hex socket screw plugs.

Mounting the Green Motion DC 44/66 EV charger

- Prepare a concrete base of 800 mm x 450 mm x 250 mm (width x depth x height) with the following:
  - Four M10 x 100 mm stainless steel threaded rods placed according to Figure 4.
  - One 48 mm diameter hole for the input electrical cable positioned as in Figure 4.
- Feed the AC power input cable through the hole in the concrete base into the unit housing.
- Place the unit on a concrete base, fit the four M10 flat washers and nuts onto the threaded rods, and securely lock the nuts.
- The appropriate type of nuts and flat washers must be selected by professional and qualified personnel.
- Figure 5 shows the unit installed on a concrete base.

Figure 1. Front view of the Green Motion DC 44/66 EV charger (with free space for air inlet)



Tag	Description
1	Colour touchscreen display
2	RFID reader
3	LED display
4	Emergency stop button

Figure 2. QR code for installation checklist online form

Figure 3. Lifting instructions for the Green Motion DC44/66 EV charger

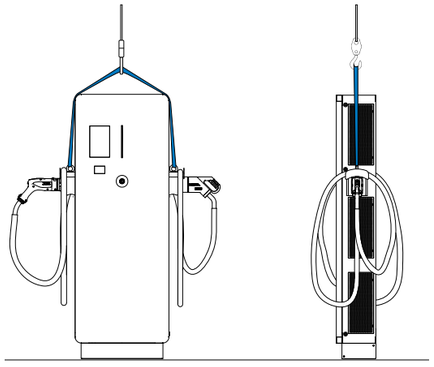
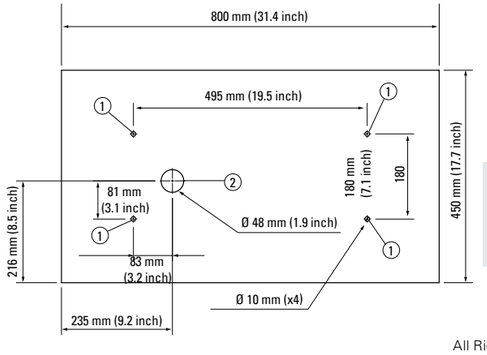


Figure 4. Concrete base for charging station with positions of threaded rods and electrical cable hole



Tag	Description
1	M10 threaded rods
2	Electrical cable hole

During installation, unplug the Green Motion DC 44/66 EV charger. Read and understand the safety instructions and warnings prior to installation.

2. Electrical connections and unit switch-on

Standard wiring

- DC leakage protection is provided by means of electrical galvanic separation and an internal Insulation Monitoring Device.
- Eaton recommends that DC EV chargers installed in a TT system are equipped with an RCD upstream in accordance with IEC 60364-7-722.
- Eaton recommends that DC EV chargers installed in a TN system where a fire hazard is present are equipped with an RCD upstream in accordance with IEC 60364-7-722.
- Eaton's support teams can help with the selection of the proper RCD to be used.
- In case of connection in TN-C-S networks, earth rods must be used.
- It is not possible to install the unit in an IT grid configuration.
- Always refer to local regulations which may differ from and can supersede the international regulations listed above.
- The circuit breakers and the power cable minimal cross-sections are overvalued to ensure the functionality of the EV charger with higher temperatures. Refer to the installation manual and local standards for further details.

Electrical connections and terminals

- Connect the AC grid power cables to the rotary switch located at the bottom left of the charger. Connect the protective earth (PE) cable to the bolted joint on the floor of the unit (see Figure 7). Refer to the appropriate section of the Green Motion DC 44/66 installation manual on how to open the front door of the unit.
- The AC grid power cables and communication cable can be inserted from the bottom-left side of the unit.
- Verify that the phase (L1, L2, L3) and neutral (N) cables from the AC grid are connected to the power terminals of the rotary switch respecting the correct assignment (see Figure 7), and that the protective earth (PE) cable is connected to the bolted joint (see Figure 8).
- Verify the electrical continuity of the protective earth connection between the front door and the unit housing (see Figure 8), and that the entire EV charger is properly grounded.

Unit switch-on

- Check that the unit is securely mounted on the concrete base, and is correctly fixed to the floor in accordance with local regulations.
- Check that the electrical connections have been made correctly in accordance with local regulations.
- Check that the protective earth (PE) connection (MANDATORY) has been made correctly in accordance with local regulations.
- Perform checks on the continuity of the connections of the protective conductor, insulation resistance, phase rotation, RCD triggering current, triggering time, etc., in accordance with local regulations.
- Check that the rotary switch inside the unit is turned on.
- Verify that the front door of the housing is closed and secured with the square-key cam locks.
- If the above checks are successful, proceed as follows:
  - Switch on the main AC grid circuit breaker,
  - Wait for the display to turn on.
- The unit is ready for use. Follow the instructions on the touchscreen display.
- If applicable, you can configure the router to connect to the Eaton Charging network manager.

Configuration and commissioning

- For further information, refer to the Green Motion DC 44/66 installation manual at www.eaton.com/greenmotiondc44_66.

Figure 5. The assembled charging station on the concrete base

Figure 6. Green Motion DC 44/66 EV charger wiring

Tag	Description
1	Grid
2	Circuit breaker
3	RCD
4	Green Motion DC 44/66 EV charger

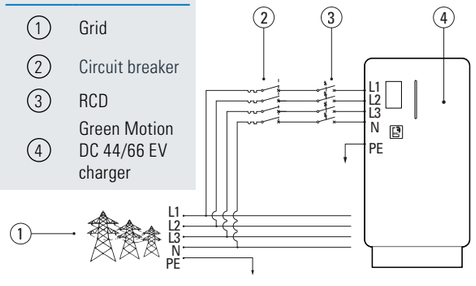


Figure 7. AC grid connectors inside Green Motion DC 44/66 EV charger

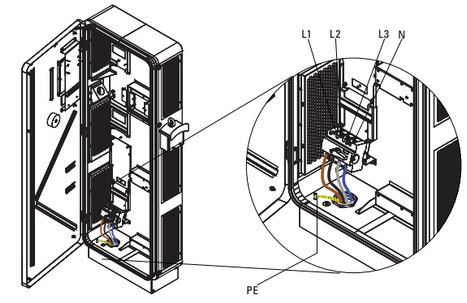
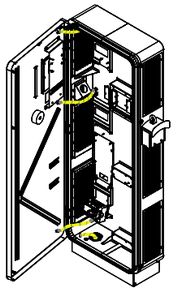


Figure 8. Grounding of the housing of Green Motion DC 44/66 EV charger



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