



Instructions to change the Maximum Current Value on an EO Mini

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1 Introduction

This document details how to change the maximum current rating of an EO Mini.

NOTE – it is only possible to reduce the maximum current rating of the EO Mini **IF** the rating plate sticker on the EO Mini states “Up to 7.2kW/32amp”. Otherwise, the rating plate is invalidated. This information was added to the rating plate from July 2018.

As feedback is received from customers, the design of the EO Mini evolves and improves. There are currently three versions of the EO Mini which can have their maximum current settings changed. These are detailed below in this document

2 Changing the Maximum Current

In order to change the maximum current rating, the following steps must be taken. Care needs to be taken as to whether the EO Mini is to be installed in an installation that requires the mains test (e.g. UK) or one that doesn't need the earth tested (e.g. Norway)

The current selection is made via a 16 position rotary switch on the bottom left hand corner of an EO Mini:



Figure 1 - Rotary switch to select Maximum current rating

3 Firmware Version 8

3.1 Identifying Firmware Version 8

Firmware version 8 is identified by if the EO Mini has a 16 way switch and the serial number is less than EO-05418.

3.2 TN-C-S or PME Earth

The following switch positions determine the maximum current rating for countries that use a TN-C-S or PME earthing system.

Switch Position	Mains Test (Loss of earth)	Current Rating (Amp)
0	YES	11
1		12
2		14
3		16
4		19
5		22
6		24
7		28
8		30
9		32

3.3 IT Earth

The following switch positions determine the maximum current rating for countries that use an IT earthing system. This option disables the loss of mains tests in the firmware

Switch Position	Mains Test (Loss of earth)	Current Rating (Amp)
A	NO	11
B		12
C		16
D		22
E		28
F		32

4 Firmware Version 11 and above

4.1 Identifying Firmware Version 11 and above

Firmware version 11 & 12 are identified from EO Mini Serial Number EO-05418 onwards. Additionally a FW Version sticker has been stuck onto the relays as shown below

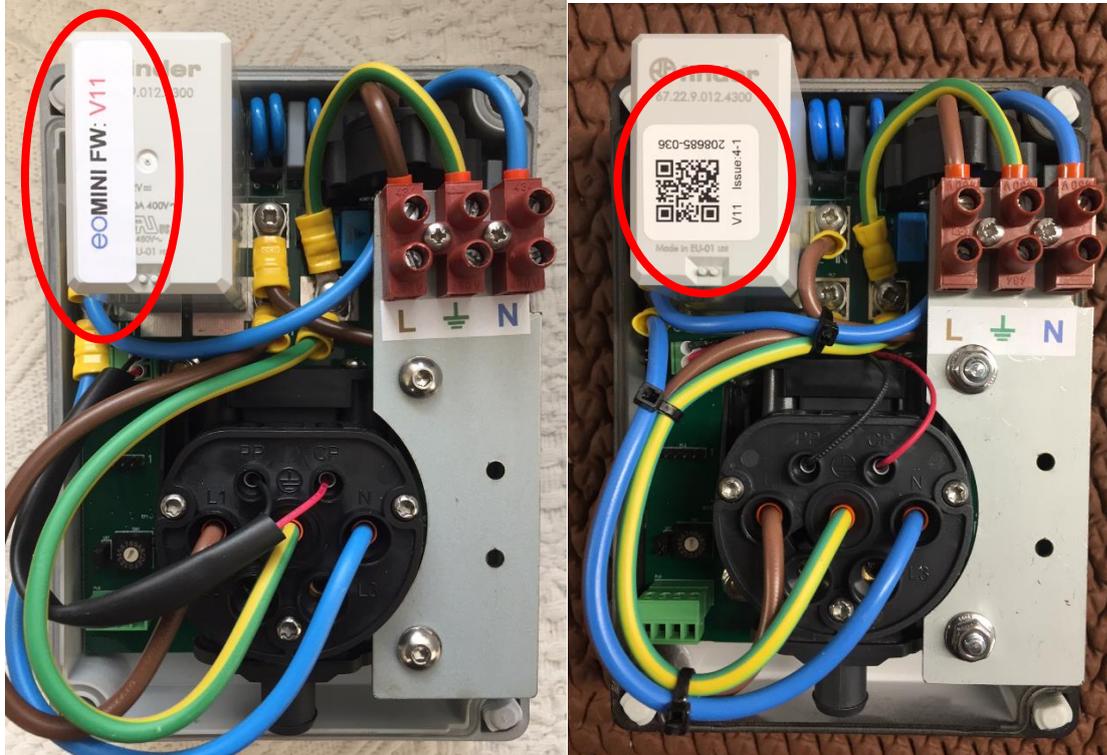


Figure 2 - Sticker showing FW Version 11

4.2 TN-C-S or PME Earth

The following switch positions determine the maximum current rating for countries that use a TN-C-S or PME earthing system.

Switch Position	Mains Test (Loss of earth)	Current Rating (Amp)
0	YES	0A (default state)
1		6A
2		8A
3		10A
4		12A
5		16A
6		20A
7		25A
8		30A
9		32A

4.3 IT Earth

The following switch positions determine the maximum current rating for countries that use an IT earthing system. This option disables the loss of mains tests in the firmware

Switch Position	Mains Test (Loss of earth)	Current Rating (Amp)
A	NO	6A
B		10A
C		16A
D		20A
E		25A
F		32A

These switch setting values were chosen to align with commonly used MCB ratings.

5 Further Technical Support

All EO Charging technical documentation is published in the EO Resource Centre, this is found at:
<https://www.eocharging.com/service-support/>

The EO Support team can be reached at:

- Email: support@eocharging.com
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