

## Elmdene International Ltd

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### UNIVERSAL Enclosures

### Models UNIVERSAL-ENC-L / UNIVERSAL-ENC-M

## 1. INTRODUCTION

This instruction manual details the installation procedure for a range of 12 and 24Vdc power supplies in each of two 'UNIVERSAL' type enclosures which employ a unique mounting system to allow fitment of a variety of 3<sup>rd</sup> party controllers / devices.

## 2. ENCLOSURE TYPES

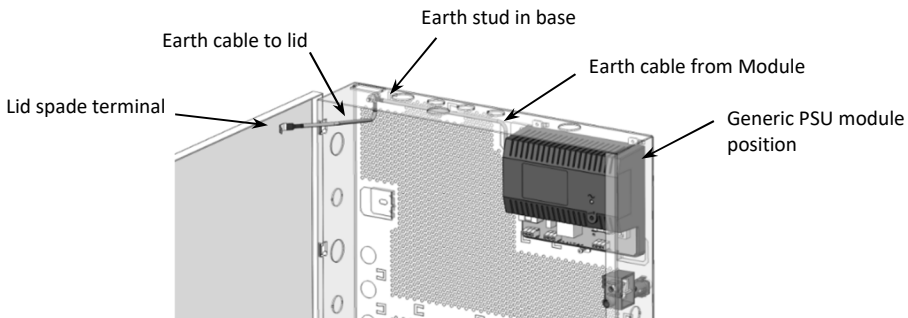
UNIVERSAL-ENC-M (Medium)	Width: 382mm Height: 337mm Depth: 90mm
UNIVERSAL-ENC-L (Large)	Width: 407mm Height: 507mm Depth: 90mm

## 3. INSTALLATION INSTRUCTIONS

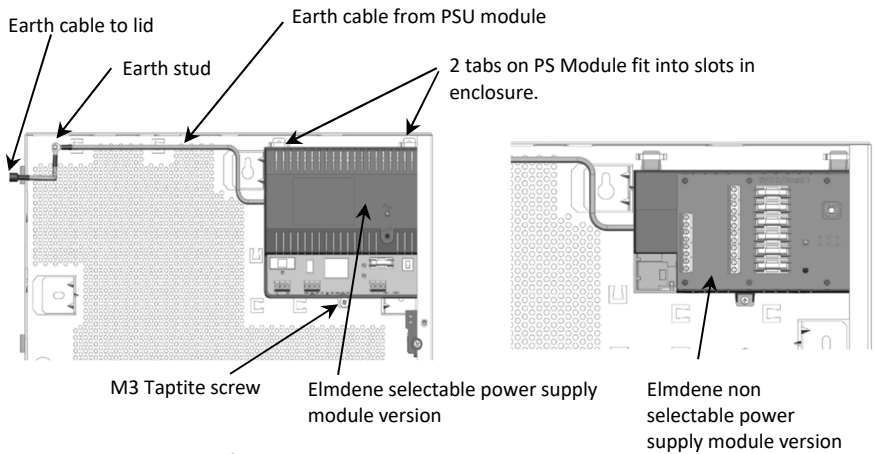
Installation and repair must be carried out by a certified professional or qualified electrician in accordance with all relevant safety regulations.

### Assembly of Elmdene approved Power Supply Modules in Enclosure

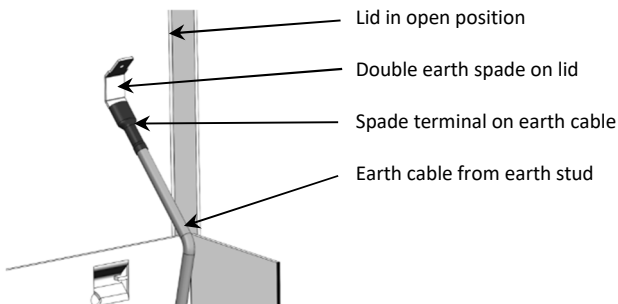
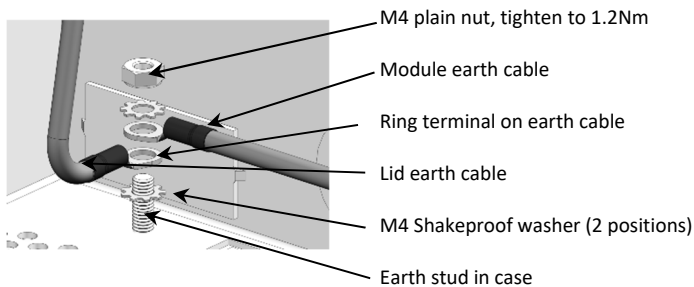
The installation procedure is the same for each PSU type in either enclosure. The module is mounted to the top right hands side of the enclosure. Receptables and a fixing hole are present for mounting Elmdene power supplies.



## Step 1: Install PSU Module.



## Step 2: Install earth cable from earth stud to lid.



### Step 3: Install PSU module earth cable to earth stud.

Assemble the Lid and PSU module Earth cables using washers and nuts as illustrated.

Fasten PSU module cable with cable tie adjacent to Mains Input and at other locations depending on the enclosure type.

### Earth continuity test.

It is essential that an earth bonding test is performed to ensure the continuity of the protective conductors after assembly.

**NOTE:** It is the installers responsibility to ensure the product meets/passes earth continuity testing, as specified in local regulations.

### Step 4: Enclosure mounting.

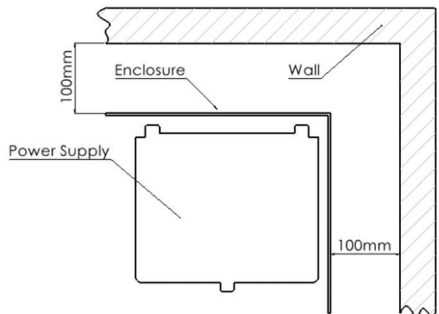
This unit is only suitable for internal installations, and as permanently connected equipment. This unit must be fed from a mains power source having a separate (approved) disconnect device and fitted with a fuse or other over-current protection device rated at 3A maximum. Ensure that the disconnect device used has appropriate earth fault protection to the applicable standard. *EQUIPMENT MUST BE EARTHED.* Before installation, ensure that external disconnect device is *OFF*. The PSU should be installed according to all relevant safety regulations applicable to the application.

#### Mounting to wall.

- Mount enclosure securely using 5mm diameter x 25mm minimum long screws that are appropriate for the mounting material.
- Allow minimum clearance of 100mm between the enclosure sides and ceilings or adjacent wall as illustrated above. The enclosure must be mounted on a solid and continuous surface (e.g.: a wall, not a column).

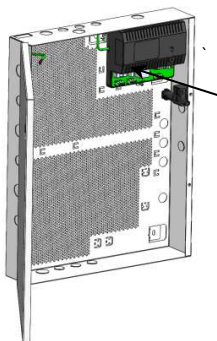
#### Cabling

- Route mains and low voltage output cables via different knockouts and/or cable entry holes.
- Use bushes and cable glands rated to UL94 HB minimum.
- Attach correctly rated mains cable (minimum 0.5mm<sup>2</sup> [3A], 300/500Vac) and fasten in place with cable ties.
- Apply mains power. Check for 13.8v/27.6Vdc on load outputs. (depends on PSU module fitted)  
Check Green Mains LED is ON.
- Disconnect mains power.

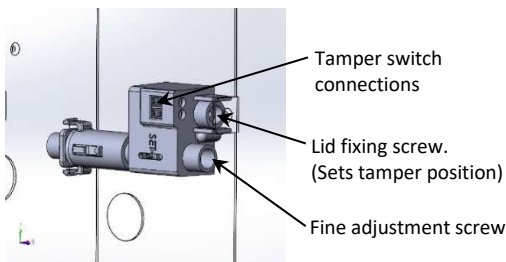


## Tamper

- Connect tamper switch to the inputs of the control and indicating equipment (CIE).
- Close the lid and secure with the screws provided.
- With the unit mounted on the wall, check that the rear tamper is not over a recess or raised area that will adversely affect its operation (e.g.: over a mortar course)
- Check that the tamper switch is:
  - CLOSED when the cover is closed and the lid retaining screws are fitted.
  - OPEN when the retaining screws are removed.
- Use the fine adjustment screw if necessary to align the marks on the set position indicator and ensure the tamper switch operates when the lid opens and closes.
- Close and fasten the cover. Re-check the tamper circuit is closed at the control panel.



Tamper position in enclosures.  
(Similar for both)

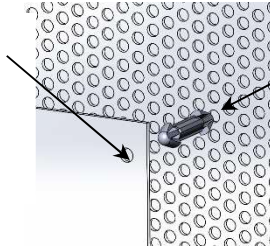


## 3<sup>RD</sup> PARTY CONTROLLERS / DEVICES

The hole pattern in the enclosures allows a wide variety of 3rd-party controllers to be mounted in any position. A kit is included that comprises different sizes of standoffs and self-tapping screws for this purpose.

For PCB type controllers, use arrowhead type standoffs supplied in the fixing kit:

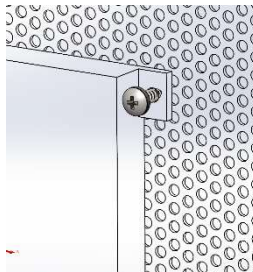
1. Fit standoffs into Controller mounting holes (3mm/3mm or 4mm/3mm pcb spacers)



2. Align controller in suitable position in enclosure

3. Press standoffs into selected hole position

For controllers that are mounted using screws:



1. Align controller in suitable position in enclosure

2. Fasten self-tapping screws, max torque 0.6Nm.

Recommended screw type:

No.6/M3.5 x suitable length self tapping/Taptite type screw

## MAINTENANCE

There is no regular maintenance required of the enclosures other than periodic observation to check mountings.

## END OF LIFE

This product falls within the scope of EU Directives 2012/19/EU Waste Electrical and Electronic Equipment (WEEE) and 2013/56/EU (Battery). At the end of life, the product must be separated from the domestic waste stream and disposed via an appropriate approved WEEE disposal route in accordance with all national and local regulations.

Before disposal of the product, any battery must be removed and disposed of separately via an appropriate approved battery disposal route in accordance with all national and local regulations. Package used batteries safely for onward transport to your supplier, collection point or disposal facility.

See Specification for battery type information.

For more information see: [www.recyclethis.info](http://www.recyclethis.info)

*The packaging supplied with this product may be recycled.*

## COMPLIANCE

See [Elmdene International](http://Elmdene International) web site for current Declaration of Conformity.

## SYMBOLS

### Explanation of symbols: (Not all may apply)



Fault Indication



Shock Risk - isolate before attempting access



Mains Present



Do not dispose of in unsorted waste



Protective Earth

Specifications subject to change without notice