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UNIVERSAL Enclosures

Models

UNIVERSAL-ENC-M
UNIVERSAL-ENC-L
UNIVERSAL-ENC-XL

1. INTRODUCTION

This instruction manual details the installation procedure for a range of 12 and 24Vdc Power supplies units (PSUs) in each of three 'UNIVERSAL' type enclosures. They employ a unique mounting system to allow fitment of a variety of 3rd 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
UNIVERSAL-ENC-XL (X Large)	Width: 479mm Height: 515mm Depth: 146mm

3. INSTALLATION INSTRUCTIONS

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

3.1. 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.

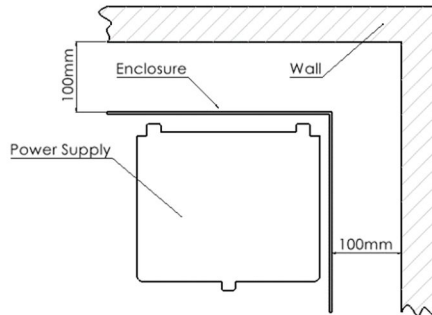


Figure 1: Mounting clearances

- Allow minimum clearance of 100mm between the enclosure sides and ceilings or adjacent wall (Figure 1). The enclosure must be mounted on a solid and continuous surface (e.g.: a wall, not a column).
- Mount the enclosure securely using 5mm diameter x 25mm minimum long screws that are appropriate for the mounting material. Mounting positions for each enclosure are shown in Figure 2

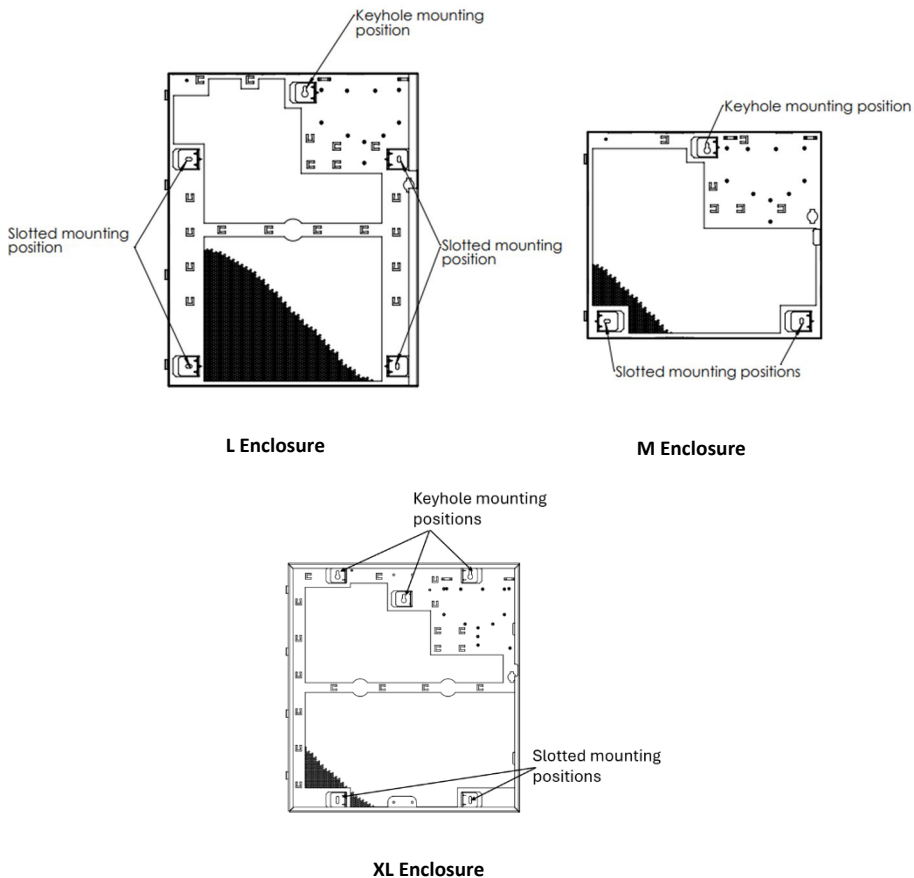


Figure 2: Enclosure mounting points

3.2. Assembly of Elmdene approved Power Supply Units in Enclosure

- The installation procedure is the same for each PSU type in each enclosure. The PSU is mounted to the top right hand side. Two slots and a fixing hole are present to secure the PSU in position (Figure 3)
- 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 0.5mm² [3A], 300/500Vac) and fasten in place with cable ties.

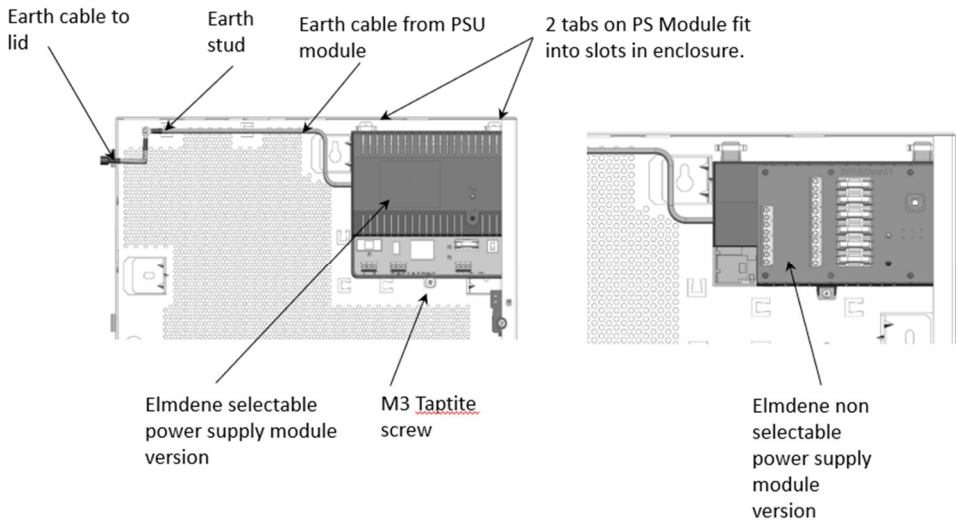


Figure 3: PSU types, position and Earth cable

Earth cable connections

M and L Enclosures:

- Undo M4 Nut and remove Shakeproof Washer
- Add Earth cable Ring terminal from the PSU
- Replace Shakeproof washer and nut
- Torque nut to 1.2Nm

XL Enclosure

- Assemble Earth stud at PSU position Figure 4 and as shown in Figure 5
- Fit Earth Spade connector to Spade terminal on lid (Figure 5)

- 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.

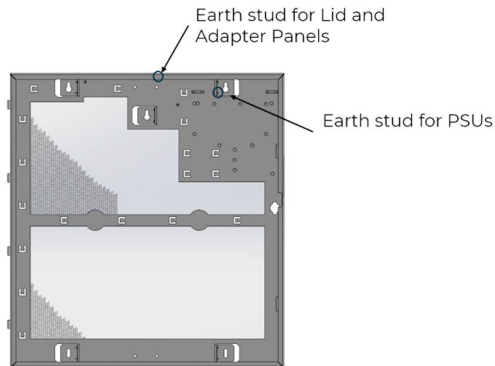


Figure 4: XL Enclosure Earth stud positions

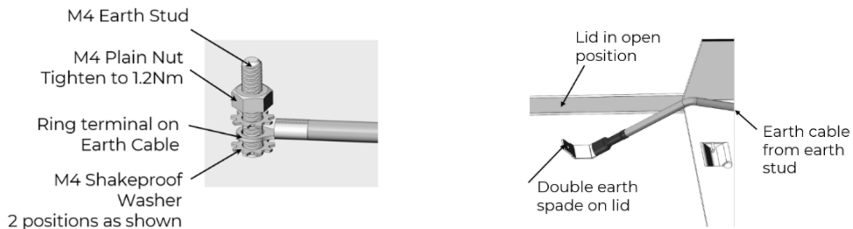


Figure 5: Earth Cable assembly

- Refer to the selected PSU User manual for AC mains power up and testing procedure. Check for 13.8v/27.6Vdc on load outputs. (depending on PSU fitted) Check Green Mains LED is ON.
- Disconnect mains power.

3.3. Tamper (Figure 6)

- 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.

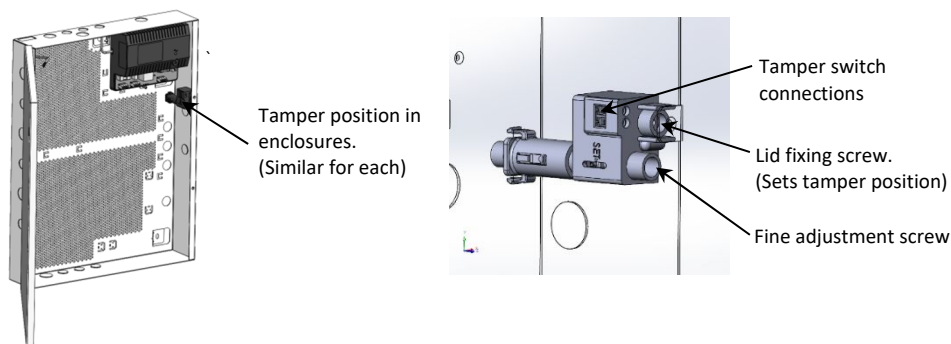


Figure 6: Tamper set up

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 (Figure 7):

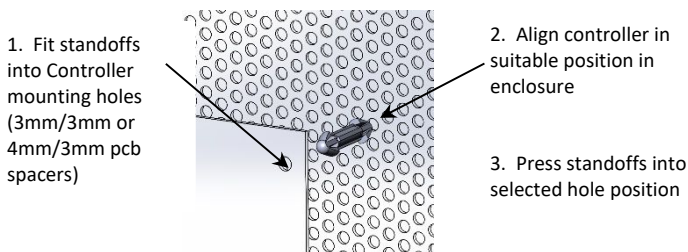


Figure 7: PCB type controller mounting

For controllers that are mounted using screws (Figure 8):

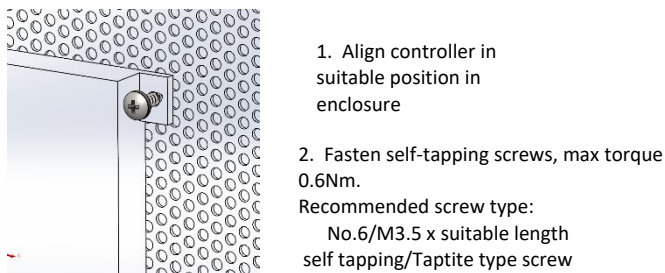


Figure 8: Screwed controller mounting

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

The packaging supplied with this product may be recycled.

COMPLIANCE

See 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