

POWER SUPPLY TYPE THREE

Many standard Fire and Gas Detection control units requires a nominal 24V DC for both Main and Emergency inputs. The fully approved Power Supply Type 3 provides both power supply and charging facilities for the (optional) integral sealed lead acid standby batteries of maximum 24V 14AH capacity. The PSU will accept 110, 120, 220, 240 and 254V 50/60Hz. mains supplies and provide up to 27.6V at 5A.

The maintained supply is used to drive the control unit and associated external audible 24V DC alarms.



APPROVALS – Lloyd's Register of Shipping Certificate No. 87/0119

The Type 3 Power Supply Unit is approved by the UK Department of Transport (Marine and Coastguard Agency). The Type 3 Power Supply is approved to Lloyd's Register of Shipping ENVI, 2 & 3 standards. A summary of the tests successfully accomplished is given below: -

INSULATION RESISTANCE:

Greater than 100 Mohm at 500V and greater than 10 Mohm after humidity, low temperature and salt mist tests (see below).

POWER SUPPLY PERMANENT:

+/- 10% voltage variation, combined with +/- 5% frequency variation.

POWER SUPPLY TRANSIENT:

+/- 20% voltage variation for 1.5

POWER SUPPLY FAILURE:

3 power interruptions with a minimum break time of 30 seconds.

INCLINATION STATIC:

22.5 deg. on either side of the vertical in all planes.

INCLINATION DYNAMIC:

22.5 deg. on either side of the vertical with a roll period of 10 seconds.

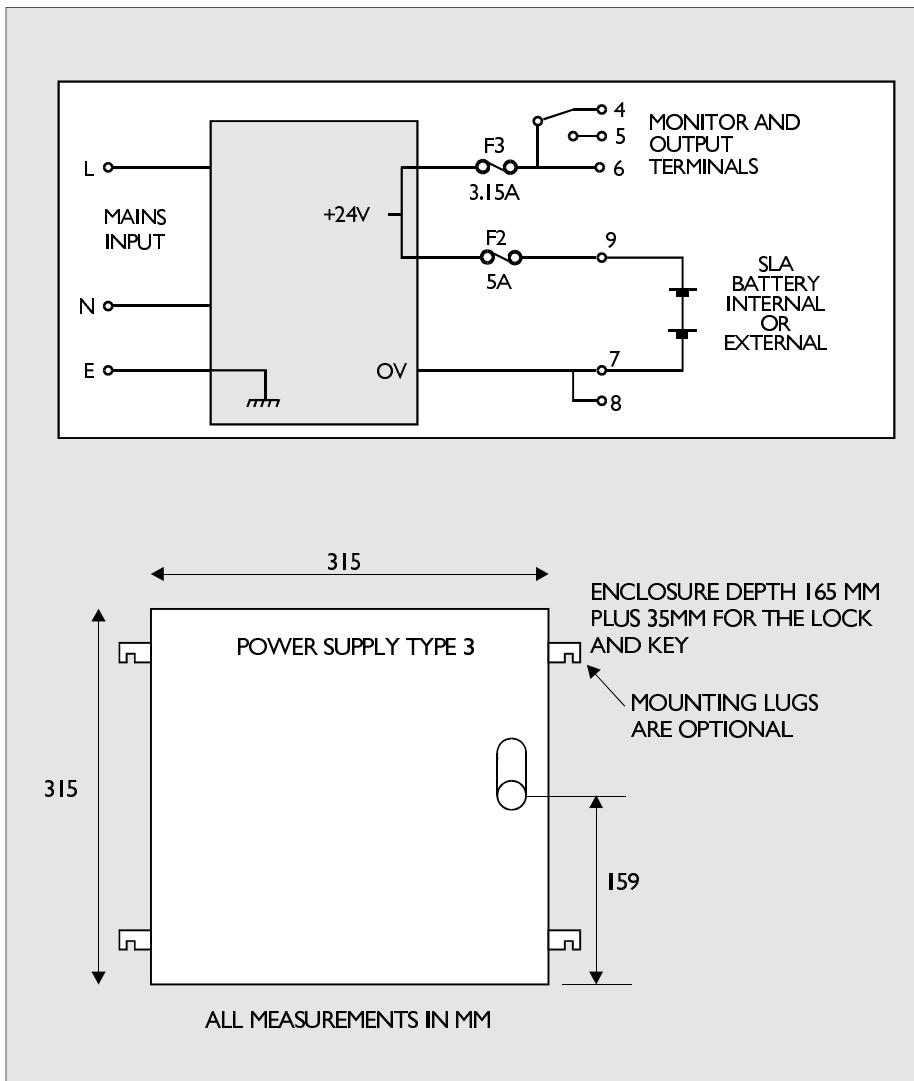
VIBRATION:

2-13.2 Hz at +/- 1.5mm displacement.

13-100 Hz at +/- 1.0g acceleration.

100-13 Hz at +/- 1.0g acceleration.

13.2-2 Hz at +/- 1.5mm displacement.



HUMIDITY CYCLIC:

20 to 55 deg. C +/- 2 deg C at 95% RH +/- 5%.

SALT MIST:

Exposure to standard salt solution at 35 deg C, 95% RH for 28 days.

DRY HEAT:

+ 70 deg C.

LOW TEMPERATURE:

- 25 deg C.

HIGH VOLTAGE:

2KV AC.

ELECTRO STATIC DISCHARGE:

8KV direct to enclosure.

**ELECTRO
MAGNETIC
INTERFERENCE**

CONDUCTED LF:

10% of input voltage to the fifteenth harmonic, decreasing to 1% at the hundredth harmonic. Input supply frequency 50Hz to 10kHz.

CONDUCTED HF:

10 kHz to 50 MHz modulated 30% at 1kHz, with a carrier level of 1V.

SPATIAL RFI:

30 kHz to 500 MHz amplitude modulated 30% at 1 kHz, with an electric field strength of 10 V/m.

POWER LINE TRANSIENTS:

1 kV amplitude 50 ns width pulses with a rise time of 5ns at a PRF OF 5000 P/S 1 kV amplitude 50 microsec width pulses with a rise time of 1.2 microsec at a PRF of 1 p/s.

CONTROL UNITS AVAILABLE

Electronic Devices Limited manufacture a wide range of control panels. Most are Marine Approved and Hazardous Area certified where necessary. The list below is an indication of what is available, for further details please contact Electronic Devices Ltd.

**FIRE DETECTOR
TYPE ED 816/820**



Marine Approved 4, 16 and 32 zone Fire Detection control units with optional matching repeater panels. All manufactured using the same well proven detection circuit which has been used for many years with a reputation for high reliability.

**GAS DETECTOR
TYPE ED 810**



Marine Approved 4 channel gas detection control unit. BASEEFA and ATEX certified for connection to Hazardous Areas. Sensors available include most flammable and toxic gases using either Semiconductor, Catalytic or Electrochemical cell technology.

**ALARM SYSTEM
TYPE ED 700**



Marine Approved multi-functional control panel, custom built to individual requirements including Gas Detection, Fire Detection, Level Detection, Water Ingress, Navigation light monitoring and Engine Alarm monitoring all inside a single enclosure.