

# **Elmdene International Ltd**

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## 24V AC VISION RANGE POWER SUPPLIES

#### **Features:**

A family of 24V ac power supplies capable of delivering fully rated current to load. Available in either low profile metal or IP66 external enclosures they are ideal for CCTV camera installations. Please see table below for available variants:

Model	IP66	Load Current	Fused Outputs	PTC Rating @ 20°C
VR2403-P3E	✓	0.3A	1 x 315mA	
VR2410-PTC-P	~	1A	1 x 1A (PTC)	I <sub>H</sub> =1.1A / I <sub>T</sub> =2.2A
VR2420			1 x 2A	
VR2420-1P2E	✓		1 x 2A	
VR2420-4		2A	4 x 500mA	
VR2420-4P4E	✓		4 x 315mA	
VR2400-P2E	✓		2 x 1A	
VR2440			1 x 4A	
VR2440-2			2 x 2A	
VR2440-4			4 x 1A	
VR2440-8			8 x 500mA	
VR2440-8PTC		44	8 x 500mA (PTC)	I <sub>H</sub> =500mA / I <sub>T</sub> =900mA
VR2440-P	✓	4A	1 x 4A	
VR2440-PTC-P			1 x 4A (PTC)	I <sub>H</sub> =3.75A / I <sub>T</sub> =7.5A
VR2440-LP	✓		1 x 4A	
VR2440-2P	✓		2 x 2A	
VR2440-4P	✓		4 x 1A	
VR2460-4		6A	4 x 1.6A	
VR2460-4P	✓	0A	4 x 1.6A	
VR2480-T			1 x 8A	
VR2480-2-T			2 x 4A	
VR2480-4-T		8A	4 x 2A	
VR2480-8-T			8 x 1A	
VR2480-P	~		1 x 8A	
VR2480-4P	~		4 x 2A	
VR241600-8-PSU			8 x 2A	
VR24160-8-S		16A	8 x 2A	
VR24160-16-S			16 x 1A	



#### **INSTALLATION AND SET-UP**

This unit is only suitable for installation as permanently connected equipment and **MUST** be fed from a mains power source having a separate (approved) disconnect device - fitted with a fuse or other overcurrent protection device rated at 3A maximum. Ensure that the disconnect device used has appropriate earth fault protection to the applicable standard.

**Only** the -P/-LP models are suitable for external installation. These enclosures are rated at IP66; make sure that the appropriate connections made to and from the enclosure are to this level to retain the required IP rating for the product.

All other models are NOT SUITABLE for external installation unless mounted within an IP rated enclosure..

Bushings should meet a minimum flammability specification of UL94 HB.

The PSU should be installed according to all relevant safety regulations.

- 1) Fix to wall or other support structure using screws of sufficient size and length through the mounting holes note IP66 enclosure mounting holes may be found within the lid screw apertures.
- Mains input cable must be to the applicable standard with a 3A or greater current capacity, having a minimum operating voltage of 300/500 Vac.
- 3) The low voltage output cable must be correctly sized to carry the rated load current to the devices connected to the PSU.
- 4) Mains input and low voltage output cables should be routed to use different entry/exit holes in enclosure.
- 5) To comply with current BS EN60950 safety legislation the supplied cable ties must be used to secure mains input and low voltage output wiring.

#### COMMISSIONING

- 1) Ensure that the mains isolator (disconnect device) is open.
- Connect the mains input wires to the fused mains terminal block. Observe the wiring information on the product label. Fasten wiring in place with cable tie to saddle.
   Note: Equipment must be earthed.
- Connect the load connection wires to the low voltage output terminals. Fasten in place with cable tie to saddle.
- 4) Apply mains power. Verify that the load equipment is energised.
- 5) Close cover and secure using fastening screws provided.

#### **O**PERATION

This unit is intended for use by Service Personnel only - There are NO USER SERVICEABLE parts inside.

The green Mains LED will be illuminated whilst the mains supply is present. In the event of a fault condition, the red Fault LED will also be illuminated on the module (excluding 16A unboxed model).



## MAINTENANCE

There is no regular maintenance required of this PSU.

If the output of the PSU fails the cause of the failure should be investigated e.g. short circuit load. The fault should be rectified before restoring power to the PSU. The glass fuse(s) (where fitted) may need to be replaced. Ensure the correct fuse rating and type is used.

## DISPOSAL OF PRODUCT AT END OF LIFE

This product falls within the scope of EU Directives 2012/19/EU Waste Electrical and Electronic Equipment (WEEE). 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.

For more information see: www.recyclethis.info

## **SPECIFICATION**

<b>Input</b> Voltage Frequency Fuse	230V ac nominal (+10% / -15%) 50Hz 2A (3.15 for 16A versions) - 20mm 230V HRC Type
<b>Output</b> Nominal Voltage Voltage Range Output Fuse(s)	24V ac (@ 230V ac input) 23V ac to 28V ac (on full load to off load @ 230V ac) 230V ac 20mm Glass type - 'F' rated or PTC (-PTC Models)
Physical Environment	0 to 40°C @ up to 75% RH IP66 for the external enclosures (-P Models)



## COMPLIANCE

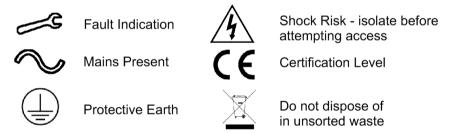
This product meets the essential requirements of the following EU Directives:

Low Voltage:	2014/35/EU
EMC:	2014/30/EU
RoHS2:	2011/65/EU
WEEE:	2012/19/EU



The packaging supplied with this product may be recycled. Please dispose of packaging accordingly.

Explanation of symbols: (Not all may apply)



Specifications subject to change without notice