



OF5 Range

High voltage oil fume purification power supply



Specification Summary

The OF5 is a small, highly efficient, mains powered power supply. The primary application is for oil fume air purification. However, it is also suitable for capacitor charging and other general purpose applications.

The OF5 has a precise, stable and adjustable output voltage, with a fixed maximum output current limit. It is safe and reliable, with a high tolerance to the noise generated by electrical discharges.

Specification

Input Voltage	The input voltage range is 200V to 240V, nominal value 220V(AC).
Output Voltage (DC)	10kV to 15kV adjustable (Output voltage for static load). <i>For other output voltages please contact the factory</i>
Output Voltage Adjustment	The output voltage is controlled by adjusting the potentiometer at the front panel, the range of adjustment for the standard models is 10kV to 15kV.
Maximum Load Current	150W Model: 10mA 300W Model: 20mA
Line Regulation	1% maximum
Load Regulation	1% maximum
Temperature Drift	300ppm / °C maximum
Ripple Voltage	100V maximum

Environmental

Operating conditions - The following environmental limits should be observed when using the power supply

Ambient Temperature	-10°C to 50°C
Relative Humidity	Less than 80%

Reliability and Quality Control

Each power supply has been tested with no load, a short circuit load and a sparking load. They have also been soak tested for no less than 48 hours at full load.

Protection

Short Circuit Protection	In the event of an output short circuit, the power supply will protect its self by limiting the output current to a safe level
Over-Current Protection	The power supply has a current limit which will prevent the load from drawing more than the maximum specified load current, this is done by reducing the output voltage
Discharge Protection	When the power supply experiences a high voltage load discharge, the output will be switched off momentarily. After which, it will be restored automatically.
Control Circuit Protection	The power supply output monitoring circuit has been designed to withstand the transient voltages which may occur during a high voltage load discharge.

Mechanical Specifications

Ambient Temperature	220mm
Relative Humidity	150mm
Relative Humidity	95mm
Relative Humidity	1kg approx.
Relative Humidity	1.5kg approx.
Relative Humidity	1.5kg approx.

Safety

- ➔ This power supply contains hazardous voltages and stored energy. Contact with the output may result in fatal injury. It should only be used and maintained by trained personnel.
- ➔ The area where the power supply is to be used should be kept clean and dry
- ➔ Keep a safe distance from the output connector and any items connected to it
- ➔ Ensure that a secure connection is made between the Earth side of the load and the green and yellow Earth lead.