



AF05/OF05 Range

High voltage air and oil fume purification power supply



Specification Summary

The AF05/OF05 is a highly compact and efficient, mains powered high voltage power supply. The primary application is for air or oil fume purification. However, it is also suitable for capacitor charging and other general purpose application.

The AF05/OF05 has a precise, stable and adjustable output voltage and output current. It is safe and reliable, with a high tolerance to the noise generated by electrical discharges.

Input Specification

| | |
|----------------------|---|
| Input voltage | The input voltage range is 200VAC to 240VAC |
| Input current | Less than 5A |

Output specification

| | |
|--------------------------|-----------------------------|
| Power range | 150W, 300W, 450W and 1000W |
| Output voltage | 10kV, 15kV, 20kV adjustable |
| Line regulation | Less than 1% |
| Load regulation | Less than 1% |
| Temperature drift | 300ppm/°C maximum |

Protection

| | |
|---------------------------------|---|
| Short circuit protection | In the event of an output short circuit, the output current will remain at the set value. |
|---------------------------------|---|

Over-current protection

In the event of an output over-current, the output current will remain at the set value.

Spark protection

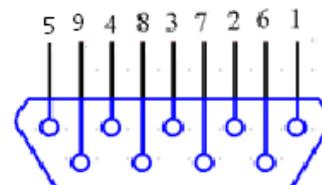
When the power supply experiences a spark on load, the output will be switched off momentarily. After which, it will be restored automatically.

Control interface

Local control mode:

The output voltage and current can be adjusted by the two potentiometers next to the 9 way D type connector. By winding both potentiometers clockwise increases the output.

Details about the 9 way D type female connector in default settings:





| | | |
|---|-------------------|---|
| 1 | DGND | Digital ground |
| 2 | FAULTY/FUNCTIONAL | OC output; OPEN=SPARK or FAULTY or STOP WORKING, CLOSE=FUNCTIONAL |
| 3 | VDEM | To be defined |
| 4 | GND | Analogue ground |
| 5 | VFBK | Voltage feedback 0 to 5V=0 to maximum voltage |
| 6 | L/R MODE | To be defined |
| 7 | HV INHIBIT | 0V or FLOATING=ON, 12V=OFF |
| 8 | IDEM | To be defined |
| 9 | IFBK | 0 to 5V = 0 to maximum current |

Remote control mode:

Remote control is also available for AF05. For further information please contact the factory.

Environmental Requirements

| | |
|----------------------------|---------------|
| Ambient temperature | -10°C to 50°C |
| Storage temperature | -20°C to 80°C |
| Relative humidity | Less than 90% |

Mechanical Specifications

| | | | |
|--------------------|-------|-------|-------|
| Power range | 150W | 300W | 450W |
| Width | 150mm | 150mm | 150mm |
| Height | 95mm | 95mm | 95mm |
| Depth | 220mm | 220mm | 220mm |
| Weight | 1kg | 1.5kg | 1.6kg |

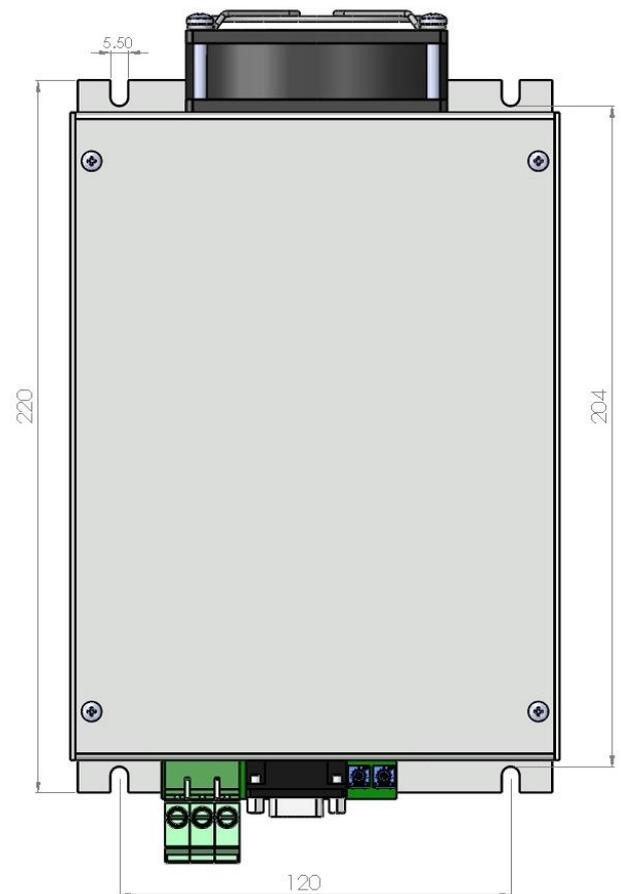
Reliability and Quality Control

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

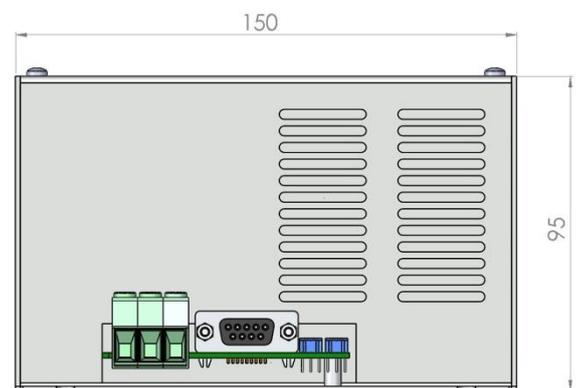
Safety

- 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.

Dimensions



Top View



Front View

For requirements other than those specified, please do not hesitate to contact the factory.