

# Floating Filament Power Supply



FDC37.5-5A-30 Series

01.142.0241-1



## FEATURES

- High withstand voltage 30kV
- Filament output is as high as 5A
- For floating filament output of Electron Beam gun, SEM, and MASS.

## SUMMARY

FDC series is a constant current floating filament power supply. The isolation voltage is as high as 30kV in such a compact size. Control with external control signal is also available.

## APPLICATIONS

- Electron Gun
- X-ray Tube
- Mass Spectrometer
- Scanning Electron Microscope(SEM)

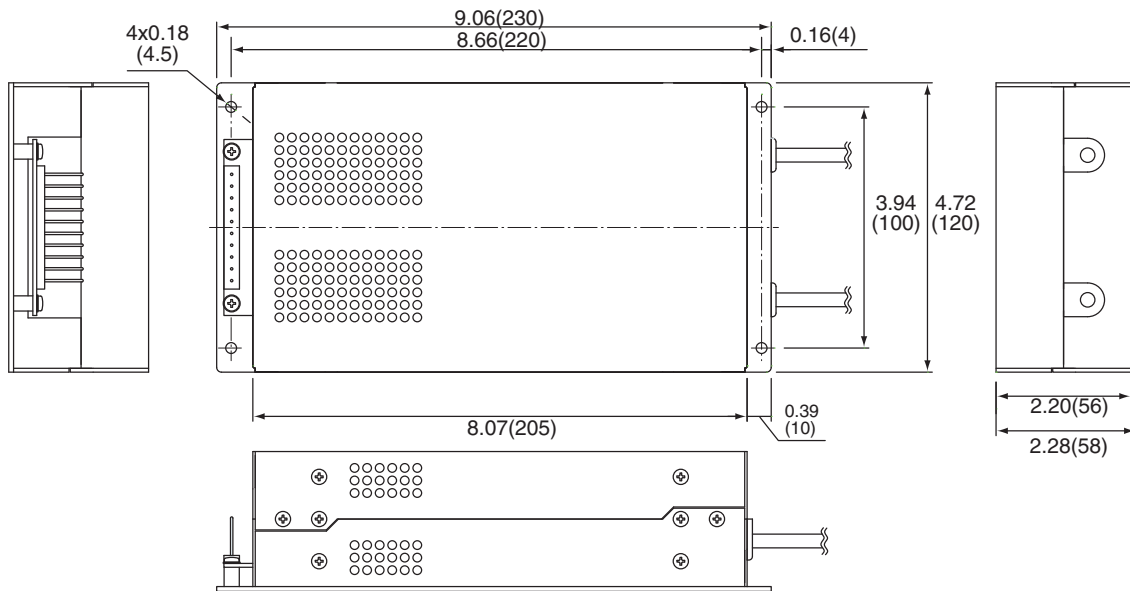
## LINEUP

MODEL	Rated output voltage	Output current	Rated output power	Open circuit voltage	Continuous withstand voltage	Input Voltage	Input Current
FDC37.5-5A-30	7.5Vdc	0 to 5A	37.5W	12Vdc	30kVdc	24Vdc±0.5V	3A max.

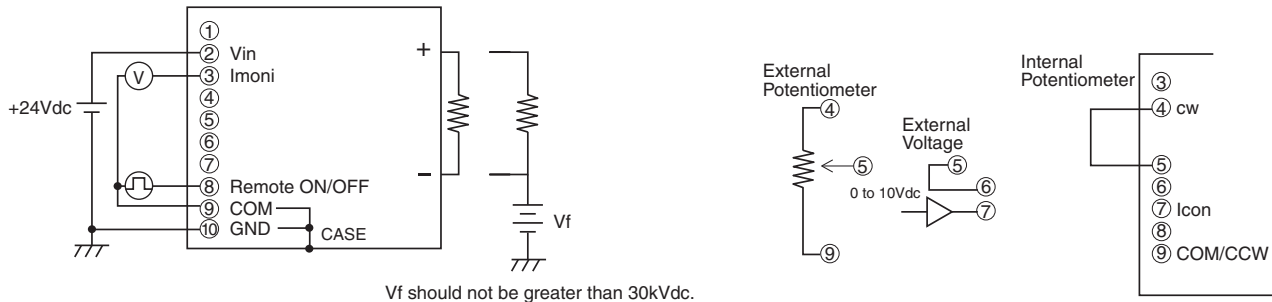
## SPECIFICATIONS

<b>Output current control</b>	Local : Internal potentiometer Remote : external control voltage 0Vdc to 10Vdc or external variable resistor 0Ω to 20kΩ
<b>Ripple</b>	200mVp-p
<b>Regulation</b>	Line: 1% of maximum output current for ±0.5V Load: 1% for 10% change in filament resistance
<b>Temperature coefficient</b>	0.1% / °C
<b>Current monitor</b>	10V / maximum output current (accuracy ±5%F.S., output impedance 10kΩ)
<b>Remote switch ON/OFF</b>	Low = ON, High or OPEN = OFF
<b>Output terminal</b>	HV cable 1m x2
<b>Environment Conditions</b>	Operation : 0°C to +40°C Storage : -20°C to +65°C Humidity : 20 to 80%RH(no condensation)

**DIMENSIONS inch(mm)**



**CONNECTION DIAGRAM**



**Warranty**

We warrant that products contained in this catalog (hereinafter, the "Products") are free from defects in material and workmanship under normal use for a period of one (1) year from the date of shipment thereof. However, the warranty period for X-ray detectors and X-ray source shall be either one (1) year from the date of shipment or 1,000 hours, whichever shorter. The above warranty shall not apply to any Product which, at our sole judgment, has been: i) Repaired or altered by persons unauthorized by us; or ii) Connected, installed, adjusted or used otherwise than in accordance with the instructions furnished by us (including being used in an inappropriate installation environment, such as in corrosive gas, high temperature and humidity). We are not liable for any loss, damage or failure of the Products after the shipment thereof caused by external factors such as disasters. If any Product is shown to be defective as satisfactory to us, we, at our sole discretion, repair or replace such defective Products at no cost to the purchaser. We assume no liability to the purchaser or any third party for special, incidental, consequential, or other damages resulting from a breach of the foregoing warranty. This warranty excludes any and all other warranties not set forth herein, express or implied, including without limitation the implied warranties of merchantability or fitness for a particular purpose. The Products are not designed and produced for such applications as requiring extremely high reliability and safety, or involving human lives (such as nuclear power, aerospace, social infrastructure facility, medical equipment, etc.). The use under such environment is not covered by this warranty and may require additional design and manufacturing processes. Regarding RoHS compliance, Matsusada Precision Inc. does not intentionally use objectionable substances in the products listed within this catalog. Matsusada Precision Inc. manufactures products using components which, according to our suppliers, are "RoHS compliant parts". However, Matsusada Precision does not analyze each and every unit to confirm. Therefore, there may be some customized products which do not comply to RoHS. Please contact your nearby sales office for confirmation.



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