

1.5 Watt

- 12V & 24V Inputs
- Outputs up to 25kV
- Short Circuit Protected
- Programmable Output Voltage
- Low noise oscillator design



Dimensions:

3.75 x 1.5 x 1.0" (95.3 x 38.1 x 25.4mm)

The DX series is a line of high voltage power supplies providing up to 25,000 VDC for applications requiring a compact source of clean, reliable, low cost high voltage.

This unit exhibits low noise and EMI/RFI by utilizing a quasisinewave oscillator and a fully enclosed ferrite pot core transformer. The output voltage is programmed by an external potentiometer or resistor. The high voltage connection is made through a 30kV silicone wire.

Key Applications:

- Capacitor Charging
- Ionization
- Dielectric Testing
- Testing
- Air Cleaning
- Electro-static Generators

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage Range	11.4	12	13.2	VDC	For 12V Input Models
Input Current, No Load			200	mA	
Input Current, Full Load			400	mA	
Input Voltage Range	22.8	24	26.4	VDC	For 24V Input Models
Input Current, No Load			150	mA	
Input Current, Full Load			250	mA	

Output

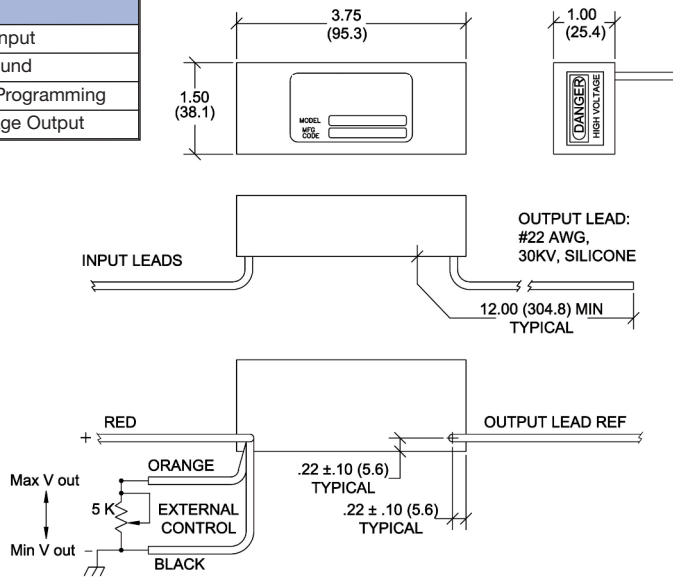
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage			25	kV	See Models and Ratings Table
Output Current			100	μA	See Models and Ratings Table
Output Voltage Tolerance			5	%	Nominal Vin, Full Load
Ripple & Noise			2	%	Peak to peak
Switching Frequency	30		80	kHz	
Construction	DAP case material. Solid vacuum encapsulation, UL 94 V-0 rated.				
Operating Temperature	-10		+50	°C	Case temperature
Storage Temperature	-25		+90	°C	

Models & Ratings

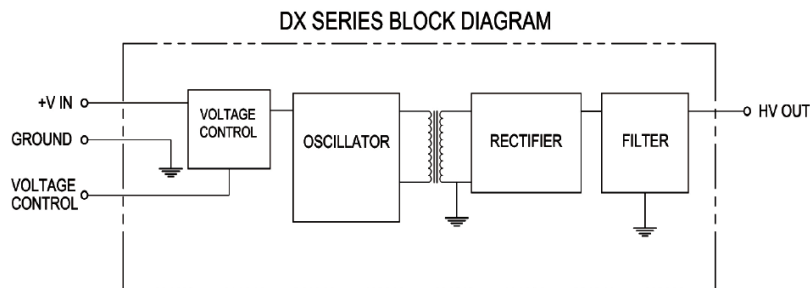
Output Voltage	Output Current	Input Voltage	Model Number
+1.8kV to +12kV	100µA	12V	DX120R
-2.5kV to -15kV	100µA		DX150N
+3kV to +20kV	75µA		DX200
+4kV to +25kV	60µA		DX250
+10kV to +25kV	60µA	24V	DX250-24
+10kV to +25kV	60µA		DX250-24R

Mechanical Details

Connections	
Red	(+) Input
Black	Ground
Orange	Resistance Programming
White	High Voltage Output



Block Diagram



Notes

- Maximum rated output current is available at maximum output voltage.
- Specifications after 1 hour warm-up, full load, 25°C, unless otherwise noted.
- Proper thermal management techniques are required to maintain safe case temperature.
- Use a 5kΩ potentiometer for programming the output voltage. Connect potentiometer wiper to orange wire.
- R suffix is used as a RoHS designator for legacy part numbers.
- All dimensions are in inches (mm)
- Weight: 7oz (198g)
- Tolerance: X.XX±0.03 (0.76)