

# Compact, Low Cost High Voltage Converter

1.5kV to 25kV (Positive or Negative) @ 1.5 Watts  
DX Series



The DX series is a line of compact power supplies providing up to 25,000 VDC for air cleaners, igniters, dielectric testers, electrostatic field generators and other applications requiring a compact source of clean, reliable, low cost high voltage. This unit exhibits low noise and EMI/RFI by utilizing a quasi-sinewave oscillator and a fully enclosed

ferrite pot core transformer. The output voltage is controlled by an external potentiometer or resistor. Both positive and negative outputs are available. The high voltage connection is made through a 30kV silicone wire. Call, fax, or e-mail your requirements for immediate attention.

## FEATURES

- Resistance Controllable
- Low EMI/RFI Sinewave Oscillator
- Small Size
- Short Circuit Protection
- Low Cost/High Performance

## OPTIONS

- 24V Input
- RoHS(-R' suffix denotes the product is designed to meet RoHS requirements i.e DX100R)
- Input/Output Connectors (DX100-DX200)
- Input/Output Isolation
- Voltage Monitor
- Epoxy:** A. Low Outgassing (NASA approved per ASTM E-959-93)  
B. UL 94 V0 flammability rating
- Fixed Output Voltage

## APPLICATIONS

- Air cleaners
- Igniters
- Dielectric Testers
- Ionizers
- Electrostatic Generators
- CRT Anodes
- Image Intensifiers
- Capacitor Charging

MODEL	OUTPUT VOLTAGE	OUTPUT*1 CURRENT
DX100	1.5kV to 10kV	100 uA
DX100N	-1.5kV to -10kV	100 uA
DX120	1.8kV to 12kV	100 uA
DX120N	-1.8kV to -12kV	100 uA
DX150	2.5kV to 15kV	100 uA
DX150N	-2.5kV to -15kV	100 uA
DX200	3kV to 20kV	75 uA
DX200N	-3kV to -20kV	75 uA
DX250	4kV to 25kV	75 uA
DX250N	-4kV to -25kV	75 uA
DX250N-24 <sup>2</sup>	-10kV to -25kV	75 uA

\*Note

- At Maximum Rated Output Voltage.
- 24V Input Option

Dimensions are in Inches  
Dimensional Tolerances: ± .03 (.76 mm)  
(Metric Equivalents in Parentheses)

WIRE COLOR	AWG	FUNCTION
Red	22	(+) Input
Black	22	Ground (Input/Output)
Orange	22	Voltage Control
30KV Silicone	22	HV Output

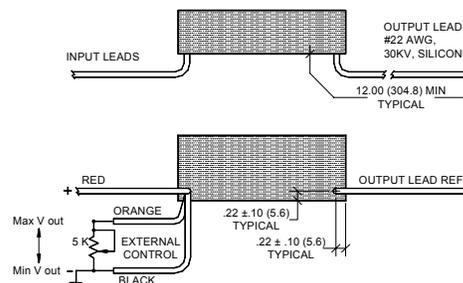
**TIP: LEAVE ORANGE WIRE DISCONNECTED AND VARY THE INPUT VOLTAGE FOR PROPORTIONAL OPERATION.**

## PHYSICAL CHARACTERISTICS

- SIZE: 3.75 x 1.5 x 1 (95.3 x 38.1 x 25.4 )
- WEIGHT: 7 Ounces (198 grams)
- PACKAGING: Fully Encapsulated
- CASE MATERIAL: Glass-filled Epoxy
- HV OUTPUT LEAD: #22 AWG, 30KV, Silicone

## ELECTRICAL SPECIFICATIONS

- INPUT VOLTAGE: 12 Volts (-5%, +10%)
- INPUT CURRENT, NO LOAD: <250mA, FULL LOAD: <400mA
- OUTPUT VOLTAGE: See Table
- OUTPUT CURRENT: See Table
- RIPPLE: 2% P-P
- VOLTAGE CONTROL: Connect 5K Potentiometer with wiper arm to orange wire. Connect remaining potentiometer lead to black wire.
- OPERATING TEMP: -10° to +50° C



e-mail sales@emcohighvoltage.com  
Web site www.emcohighvoltage.com

Phone (209) 267-1630 Fax (209) 267-0282  
70 Forest Products Road, Sutter Creek CA 95685

We reserve the right to make changes without notification