

**Proven  
Reliability**

# DX SERIES

COMPACT, LOW COST HIGH VOLTAGE DC CONVERTER

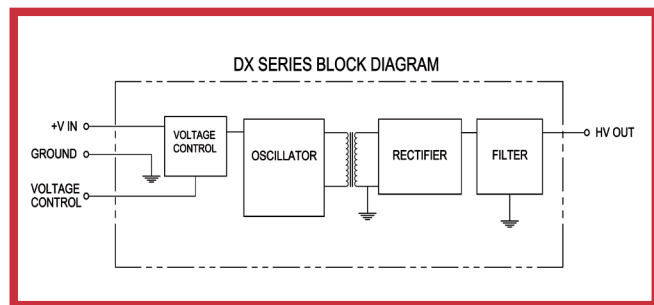
1.5 kV to 25 kV @ 1.5 WATTS



## PRODUCT DESCRIPTION

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 quasisinewave 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.

Small quantities available from stock from our factory or our stocking distributor in Switzerland, Condatas AG. For large quantity requests please consult our factory or our stocking distributor in Switzerland, Condatas AG.



## APPLICATIONS

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

## PRODUCT SELECTION TABLE

| MODEL       | OUTPUT VOLTAGE    | MAXIMUM OUTPUT CURRENT*1 |
|-------------|-------------------|--------------------------|
| DX100       | +1.5 kV to 10 kV  | 100 uA                   |
| DX100-24*2  | +2 kV to +10 kV   | 100 uA                   |
| DX100N      | -1.5 kV to -10 kV | 100 uA                   |
| DX120       | +1.8 kV to 12kV   | 100 uA                   |
| DX120N      | -1.8 kV to -12kV  | 100 uA                   |
| DX150       | +2.5 kV to 15 kV  | 100 uA                   |
| DX150N      | -2.5 kV to -15 kV | 100 uA                   |
| DX200       | +3 kV to 20 kV    | 75 uA                    |
| DX200N      | -3 kV to -20 kV   | 75 uA                    |
| DX250       | +4 kV to 25 kV    | 60 uA                    |
| DX250N      | -4 kV to -25 kV   | 60 uA                    |
| DX250-24*2  | +10 kV to 25 kV   | 60 uA                    |
| DX250N-24*2 | -10 kV to -25 kV  | 60 uA                    |

## FEATURES

- Resistance Controllable
- Low EMI/RFI Sinewave Oscillator
- Small Size
- Short Circuit Protection
- Low Cost/High Performance
- UL94 V0 Compliant Epoxy

## OPTIONS

- 24V Input - Please Consult Factory for Models Not Shown
- RoHS versions available ('R' suffix)
- Input/Output Connectors (DX100-DX200)
- Input/Output Isolation
- Low Outgassing Epoxy (NASA Approved per ASTM E595-93)
- Fixed Output Voltage

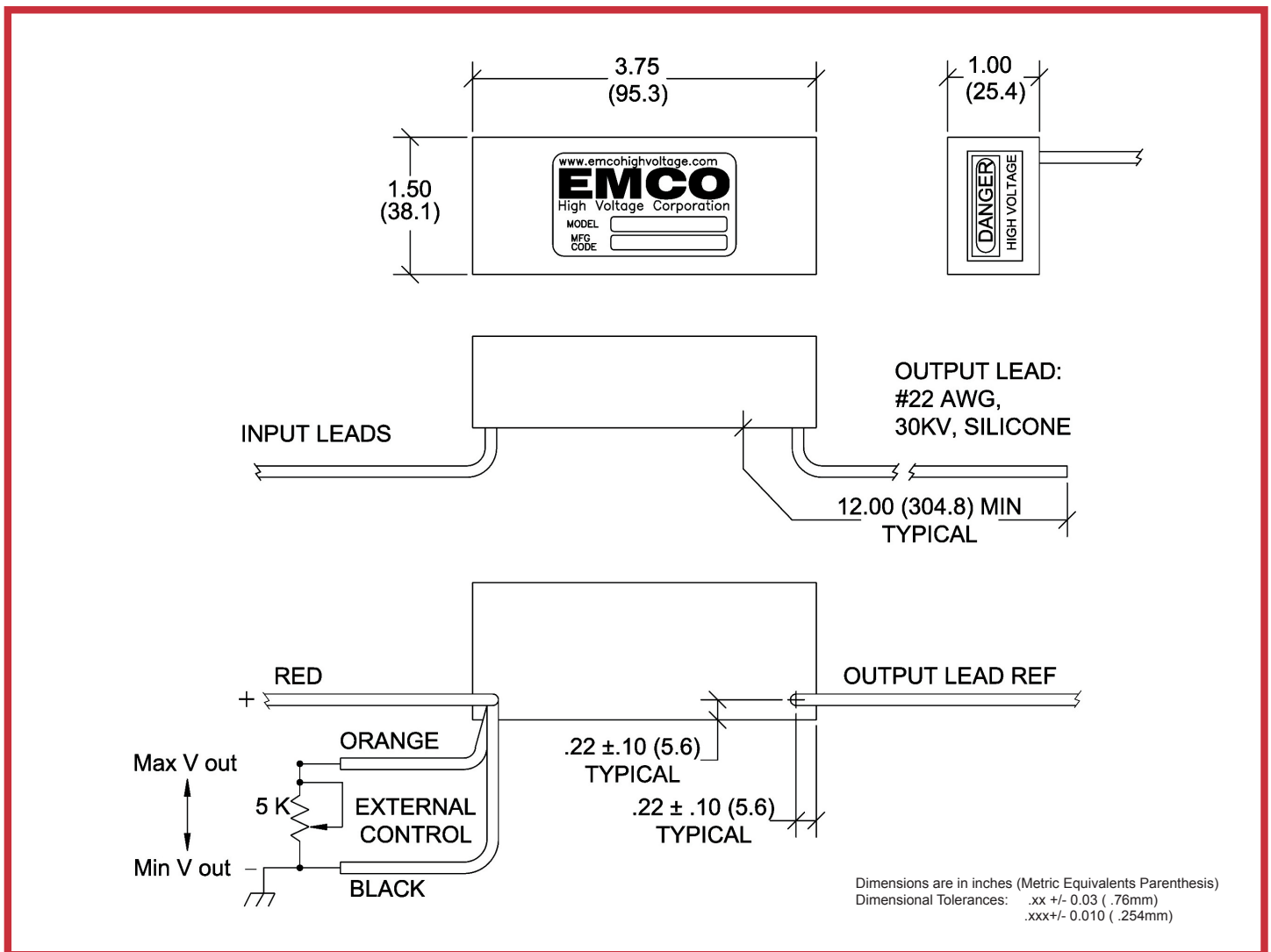


## ELECTRICAL SPECIFICATIONS\*3

| PARAMETER                   | VALUE  |
|-----------------------------|--|
| INPUT VOLTAGE               | +12 VDC (-5%, +10%)  |
|                             | +24VDC (-5%, +10%), FOR 24 VDC INPUT MODELS  |
| OUTPUT VOLTAGE              | SEE TABLE  |
| OUTPUT CURRENT              | SEE TABLE  |
| RIPPLE                      | 2% P-P   |
| VOLTAGE CONTROL             | CONNECT 5K POTENTIOMETER WITH WIPER ARM TO ORANGE WIRE.<br>CONNECT REMAINING POTENTIOMETER LEAD TO BLACK WIRE. |
| STANDARD TEMPERATURE RANGES | OPERATING: -10°C to +50°C <sup>4</sup> (CASE)  |
|                             | STORAGE: -25° C to +90°C   |

| VIN    | INPUT CURRENT |           |
|--------|---------------|-----------|
|        | NO-LOAD       | FULL-LOAD |
| 12 VDC | <250 mA       | <400 mA   |
| 24 VDC | <150 mA       | <250 mA   |

**MECHANICAL SPECIFICATIONS**



| PARAMETER  | VALUE                                       |
|------------|---|
| WEIGHT     | 7 OUNCES APPROX. (198 GRAMS)                |
| VOLUME     | 5.625 CUBIC INCHES (92.18 CM <sup>3</sup> ) |
| DIMENSIONS | 3.75L (95.25) x 1.50W (38.1) x 1.00H (25.4) |

| WIRE COLOR | AWG | FUNCTION                 |
|------------|-----|--------------------------|
| RED        | 22  | (+) INPUT                |
| BLACK      | 22  | GROUND (INPUT/OUTPUT)    |
| ORANGE     | 22  | VOLTAGE EXTERNAL CONTROL |
| WHITE      | 22  | HV OUTPUT                |

- Note:
1. At maximum rated output voltage
  2. 24V Input Option
  3. Specifications after 1 hour warm-up, full load, at 25°C unless otherwise indicated
  4. Proper thermal management techniques are required to maintain safe case temperature at maximum power output.

We Reserve the Right To Make Changes without Notification.

