

# EVERTRON, 3210C Series

UL2161 Compliant Neon Power Supply 230V Model 800-0111

Solid State, High Voltage Power Supply For Cold-Cathode (Gas Discharge) Lighting Applications

# FEATURES:

- CE Certified, UL Listed, UL2161 Compliant
- Secondary Ground Fault Interruption (SGFI)
- Over Voltage Interruption

- Immediate Shutdown On Error
- Anti-Bubbling / Anti-Mercury Migration Circuitry
- Short / Open Circuit Protected
- Light Weight / Low Cost

## SPECIFICATIONS:

**INPUT** 

Voltage:

230 VAC Nominal (210-260 VAC operating range)

Frequency: 50/60 Hz.

Current: 0.9 Amps rms maximum

Power: 120 Watts

(recommended operating max.

at nominal line voltage)

WEIGHT

0,68 kg.

**OUTPUT** 

Rated Output: 7.0kV rms

**Short Circuit Current** 32 mA rms maximum

27 mA rms typical Equivalent Sign Volts: 10kV maximum

2kV minimum

14-24 kHz

Frequency

**TEMPERATURE** 

Ambient operating: 40°C Maximum (in open air)

# Operation Under Fault Conditions:

If a situation occurs that results in either a Secondary Ground Fault or an Over Voltage Protection shutdown, the high voltage output of this device will be deactivated. Once shutdown, the output will not restart unless the power switch is pulled to OFF, and after five seconds turned back ON again. Alternatively, the fault shutdown may be cleared by removing the power cord from the mains outlet, waiting approximately 30 seconds, and then plugging it back in.

#### TABLE 1

LUMINOUS TUBE LENGTH (FEET)							
Tube Size Diameter [mm]	15	13	12	11	10	9	8
Fill Pressure mm of Hg at 100°C	9	10	11	12	13	15	16
Tube Length - Neon	14,6	11,3	9,4	7,9	6,4	4,9	3,7
Tube Length - Mercury/Argon	17,7	14,0	12,2	10,7	9,1	7,6	6,1

#### **TUBE LENGTH ADJUSTMENTS:**

Deduct 0.3 M for each electrode pair beyond the first pair. Deduct 1.5 M for use with sheet metal or metallized sign frame.

Deduct 1.5 M for each 11°C above ambient temperature of 24°C.

#### INSTALLATION:

# Mounting (see Figure 1):

- For Indoor Use Only
- Use (2), #10-24 machine screws, no more than 6,4 mm longer than the thickness of the mounting surface.
- If mounting to a metal surface other than a bar frame, a minimum 19,0 mm thick non-metallic spacer must be used.
- Mount power supply with the bottom surface in a vertical plane, such that the vents are facing up and down.
- For proper grounding of the sign frame, use a #10 internal tooth star washer between the sign frame and the mounting boss identified with the Earth Ground symbol.

#### - CAUTION -

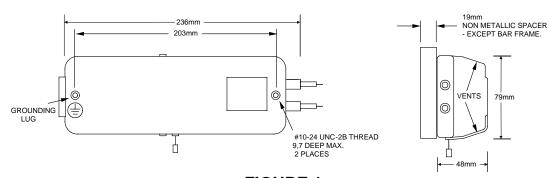
This device should not be mounted in spaces or near bodies that may exceed an ambient temperature of 40°C.

#### Wiring:

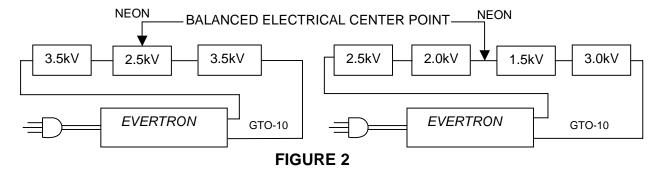
- The molded plug on the power cord must be connected to a dedicated 120V, 20A branch circuit receptacle with earth grounding means.
- The tube load for each power supply shall not exceed the footage limits specified in Table 1.
- The power supply output leads (GTO 10) are to be connected as shown in Figure 2.

## - CAUTION -

When two or more power supplies are required on a single neon sign, the output leads from one MUST NOT be wired in series or in parallel with the leads from the other(s).



# FIGURE 1



#### **WARRANTY:**

Everbrite Electronics, Inc. warrants to the original purchaser the product described herein to be free from defects in material and workmanship for a period of four years from date of manufacture and will replace or repair, at the discretion of the manufacturer, products found to be defective. The liability of the company is limited to the replacement of the defective product.

No other warranty, whether expressed or implied, including any warranty of merchantability of fitness for a particular purpose, shall exist in connection with sale or use of such products.