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

FEATURES:

- cUL & UL2161 Listed
- Secondary Ground Fault Interruption (SGFI)
- Output Over Voltage Interruption
- Anti-Bubbling / Anti-Mercury Migration Circuitry
- Open / Short Circuit Protected
- Pull Chain ON/OFF Switch
- 10 Foot Line Cord Standard 800-0228
- IEC-320 Power Connector on 8” AC cord extension 800-0229
- Integral Sleeve GTO Output Leads

SPECIFICATIONS:

**INPUT**

Voltage: 120 VAC Nominal (108-132 VAC operating range)

Frequency: 50/60 Hz.

Current: 2.0 Amps rms maximum

Power: 135 Watts max. at nominal line

**OUTPUT**

Rated Output: 5.5kV rms

Short Circuit Current: 27mA rms

Equivalent Sign Volts: 10kV maximum 2kV minimum

Frequency: 25 kHz

**WEIGHT**

1.5 Lbs. (0.68 kg.)

**TEMPERATURE**

Ambient operating: 104°F (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 then pulled back ON again. Alternatively, the fault shutdown may be cleared by removing the power cord from the AC outlet and then plugging it back in, or cycling the power with a circuit breaker or wall switch.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>LUMINOUS TUBE LENGTH (FEET)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube Size Diameter [mm]</td>
<td>15</td>
</tr>
<tr>
<td>Fill Pressure mm of Hg at 100°C</td>
<td>9</td>
</tr>
<tr>
<td>Tube Length - Neon</td>
<td>48</td>
</tr>
<tr>
<td>Tube Length - Mercury/Argon</td>
<td>58</td>
</tr>
</tbody>
</table>

TUBE LENGTH ADJUSTMENTS:

- Deduct 1.0 foot for each electrode pair beyond the first pair.
- Deduct 5.0 feet for use with sheet metal or metalized sign frame.
- Deduct 5.0 feet for each 20°F above ambient temperature of 75°F.
**INSTALLATION:**

Mounting (see Figure 1):
- For Indoor Use Only
- Use (2), #10-24 machine screws, 5/16" longer than the thickness of the mounting surface.
- If mounting to a metal surface other than a bar frame, a minimum 0.75 in. 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 (104°F).*

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 output leads from the other(s).*

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**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.