

ELECTRONIC NEON TRANSFORMER

Specifications and User's Guide
For Direct Mount Inside Channel Letters
or Channel Letter Wire Raceways

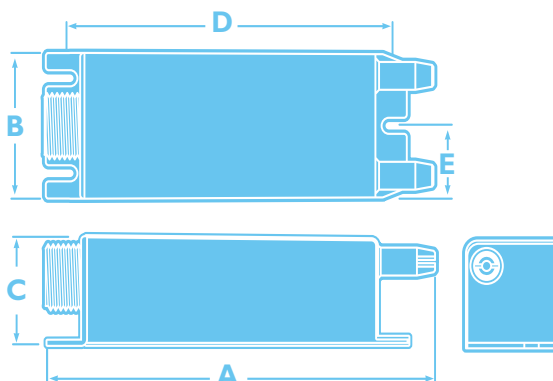
FEATURES AND BENEFITS:

- Open Circuit, Short Circuit Protection
- Self Adjusting Output On All Models
- Use with Mercury or Neon
- Solid State Technology
- Grounding Foot
- UL 2161 Listed
- Automatic Overload Shutdown
- 1/2" Conduit Nipple On Primary
- Small Size/Lightweight
- High Power Factor
- Utilizes Standard Gas Pressure
- 24 Inch H-V Output Leads
- 36 Inch Input Wires
- Complies w/CSA22.2, No. 107.1, No. 13
- Line/Load Regulated

Exclusive! These units are protected by Ventex's patent-pending protective circuitry to prevent false tripping due to capacitive current.

SPECIFICATIONS:

Input Voltage	120 VAC ($\pm 10\%$) 50/60Hz
Input Current	0.3 A (Max)
Power Factor	0.93
Output Frequency	Variable
Output Voltage	100V - 4000V
Output Current	30mA
Operating Temperature	-30° to 122°F (-34° to 50°C)
Driving Distance (Based on Standard 12mm tube. Deduct one foot from driving footages for each pair of electrodes)	
Neon	1-10 ft (0.3-3.0 m)
Mercury	1-12 ft (0.3-3.7 m)



DIMENSIONS:

Length (A)	5.0 in. (12.7 cm)
Width (B)	1.80 in. (4.57 cm)
Height (C)	1.50 in. (3.81 cm)
Mounting (D)	4.50 in. (11.43 cm)
Mounting (E)	0.90 in. (2.29 cm)
Weight	14.0 oz. (397 gr)
Primary Leads	36 in. (91.4 cm)
GTO Leads	24 in. (61.0 cm)

Thank you for purchasing a Ventex electronic neon transformer. Please read the following tips and directions carefully to insure proper installation and operation of our products. It is the responsibility of the user to ensure installation complies with local electrical codes.

READ CAREFULLY BEFORE INSTALLATION

1. Contact with the transformer's high voltage output leads can cause shock, burn or death.
2. The power supply's grounding wire must be connected to ground.
3. Be sure the high voltage output leads are connected firmly to the gas tube(s) and electrodes are properly insulated before engaging power. Intermittent connection of high voltage wires can cause hazardous arcing.
4. High voltage leads and gas tubes should be at least 1 inch away from all surfaces.
5. Output leads should not be grounded.
6. Output leads cannot be run in metal conduit.
7. When operating two or more power supplies in the same installation, be sure units are mounted at least 12 inches apart.
8. Transformer can be mounted directly inside channel letter and/or mounted on the back wall, underneath tubes.
9. Transformer should not be mounted in a position where it can stand in water.
10. Transformer is provided with GTO grommets where GTO leads exit the unit. It is recommended GTO sleeving be used.

INSTALLATION AND OPERATION

1. Firmly secure the transformer to the application with proper size screws or pop rivets.
2. If transformer is mounted on key steel or metallic surface, make sure transformer is grounded to metal frame via ground plate provided on unit. Insure all H-V output leads and tubes are at least 1 inch away from metal.
3. Firmly connect high voltage output leads to electrodes of the gas tube(s).
4. Wire the power supply to any standard, three wire, 120, 220/240 or 277 VAC (depending on model) grounded power.
5. Follow all applicable UL, NEC and local codes.

TROUBLE - SHOOTING TIPS

There is a protection circuit in the transformers that will cut off (trip) the power whenever an open circuit or overload condition occurs. If your gas tube (sign) is off, and the input power is flowing, your transformer has probably tripped due to one of the above fault conditions. If so, follow procedure outlined below.

Remove power to the transformer. This action will reset the protection circuit. Wait at least 10 seconds before reapplying power. If tripping continues, remove power and check the following:

1. Are the output leads connected securely and properly to the gas tube(s)?
2. Is the gas tube broken or cracked, resulting in an open circuit?
3. Are the gas tubes or H-V output leads in close proximity to metal, or any ground plane? (This may cause tubes to dim.)
4. Are multiple units mounted at least one foot apart from each other?

After completing the above check list and rectifying any detected problems, engage the input power to the transformer to (re)energize the gas tube (sign). If the transformer still does not work properly, call customer service at the listed phone number.

Note: Do not attempt to disassemble transformer for repairs.