

User's Guide: VT12030-120&VT12030D-120
ELECTRONIC NEON TRANSFORMER - INDOOR TYPE 7

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.

FEATURES AND BENEFITS:

- Line Load Regulated (self-adjusting -30mA O/P regardless of load size or I/P voltage fluctuations.)
- Open Circuit, Overload & Ground Faults Will Shut Unit Down
- Pull-Chain on/off Switch
- High Power Factor (Energy Saving / Cost Effective)
- Sign Grounding Connection Via Mounting Foot
- Ten Foot Power Cord (3 Pin)
- ♦ UL2161 listed ♦ Complies with CSA22.2, No. 107.1, No. 13 ♦
- ♦ Exclusive Ventex GTO Lead Clamping System ♦
- ♦ HI-LO Dimmable Versions VT12030D-120 ♦

SPECIFICATIONS: VT12030(D)-120

Input Voltage, Nominal	120VAC 50/60Hz
Input Voltage Range	105V-132V AC
Input Current @ Max Load	1.2A AC RMS
Output Voltage	1500V -12000V
Output Current	30mA RMS
Size (LxWxH)	3.15"x2.00"x6.5"
Mounting	Standard 6.0" Centers
Weight	32oz. (910g)

Output H-V Leads ** 0.25in OD GTO (10Kv min.)

**** Field Connection / User Installed // Use Sleeveless or Non-Sleeveless**

Operating Temperature: 32° to 104°F (0° to 40°C) Note: When Operating at Ambient
Temperatures Higher than Above Limit, Reduce Load by 10% for each 9°F (5°C) Ambient Rise.

Driving Distances Between Pair of Electrodes

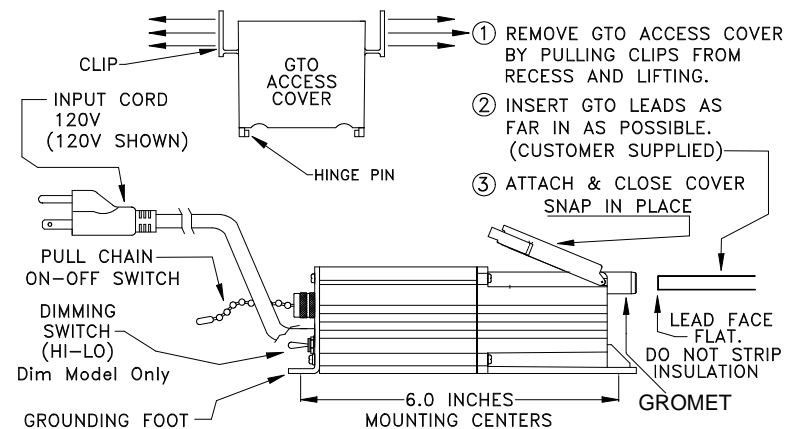
VT12030	ARGON/MERCURY			NEON		
	TUBE DIAMETER	10mm	12mm	15mm	10mm	12mm
MINIMUM (ft)	5'	5'	5'	5'	5'	5'
MAXIMUM (ft)	35'	41'	55'	29'	35'	45'

Note: Each additional pair of electrodes is equivalent to one foot of tubing. Footage chart is intended as a guide only. Actual distance will vary due to application

READ CAREFULLY BEFORE INSTALLATION

1. Contact with the transformer's high voltage output leads can cause shock, burn or death.
2. User must install **UL approved 0.250 inch OD GTO leads** in unit.
3. **Do not use two wire extension cords or cut the ground pin** to fit a two wire power outlet. The third prong of the power cord **must** be connected to ground. Removal of third pin ground plug voids UL Listing and manufacturer's warranty.
4. 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.

5. High voltage leads & gas tubes should be at least 1½ inches away from all surfaces.
6. Output leads should not be grounded.
7. Output leads **cannot** be run in metal conduit.
8. Allow adequate ventilation when mounting transformer in enclosed area.
9. When operating two or more power supplies in the same installation, be sure units are at least 12 inches apart.
10. Transformer is provided with GTO grommets where GTO leads enter the unit. Use GTO sleeving in non-sleeveless GTO wire applications.
11. Note: Do not attempt to disassemble transformer for repairs. This action will void any warranty offers made by Ventex.



INSTALLATION AND OPERATION

1. Firmly secure the transformer to the application with proper hardware.
2. If transformer mounted on key steel or metallic surface, make sure it is **grounded** to metal frame via ground foot provided on unit. Insure all H-V output leads and tubes are at least 1½ inches away from metal.
4. Remove GTO Access Cover (Pull both Clips away from case using thumbs and carefully lift off cover). Using Wire Cutters Prepare GTO Lead Ends so they are reasonably flat. Insert ends of GTO cable through the grommets. Push firmly so that the pins inside the unit penetrate the center conductor of the GTO cable to their full depth. Attach & Close the GTO Access Cover by sliding the hinge pins into the slots adjacent to the grommets. Press down on cover until it snaps into place. Check that the cable is held securely in position by the cover. Note: Use standard UL listed GTO cable #18 or #14 AWG with an Outside Diameter of 0.250 inches.
5. When required sleeve GTO lead with approved GTO sleeving, and connect ends of high voltage output leads to electrodes of the gas tube(s).
5. Cover electrode connections with approved "boots" or other approved insulation.
6. Plug the power cord into any standard, 3-wire, 120 VAC grounded power outlet. (Removal of ground plug or cutting power cord voids UL Listing and warranty.)
7. Pull chain to apply power to the gas tube(s).

TROUBLE - SHOOTING TIPS

There is a protection circuit in the transformers that will cut off (trip) the power whenever a ground fault, short or open circuit or underload/overload condition occurs. If your gas tube (sign) is off, and the input power is present, your transformer has probably tripped due to one of the above-mentioned fault conditions. If so, follow procedure outlined below. Remove power to the transformer. This action will reset the protection circuit. Wait at least 5 seconds before reapplying power. If tripping continues, remove power and check the following:

- Are the output leads connected securely and properly?
- Is the gas tube broken or cracked, resulting in an open circuit?
- Is one of the tubes leaking?
- Is there a ground fault condition occurring within the system?
- Are the gas tubes or H-V output leads in close proximity to metal, key steel or any ground plain? (This may cause tubes to dim.)
- Are multiple units mounted at least one foot apart from each other?
- Is unbalanced loading causing false tripping?

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.

Ventex Technology, Warranty

Ventex Technology ("Ventex") warrants its Neon products purchased from Ventex shall be free from defects in material and workmanship, and such products shall operate in accordance with specifications specified or assented to in writing by Ventex, at the time of sale, under normal, proper use and operating conditions. This warranty shall remain in effect for two (2) years from date of manufacture. If a product is defective, it will be repaired or replaced, at the sole discretion of Ventex, returned to Ventex, transportation prepaid.

This limited warranty is based on reasonable usage in signage for image identification purposes. This Limited Warranty is valid only when the Ventex Power Supply is used for the intended purpose and is properly installed and wired in accordance with all instructions, building codes, the latest UL Standards of Safety, NEC, CSA or any other domestic or international safety agencies. Any use outside the intended use or the conditions stated in the Ventex Neon Power Supply Instruction sheets, including extreme environmental conditions, third-party dimming, flashing or other effects, void this warranty. On all power supplies, cutting the primary power wires or the GTO less than two (2) inches will void the warranty. Cutting or altering the primary cord on any indoor power supply will also void this warranty.

If a Ventex Neon Power Supply product fails under this warranty, please contact Customer Service at Ventex Technology at (877) 908-9193 to be issued an RMA number. With the RMA number, the product should be returned to Ventex Technology transportation prepaid, within 30 days of RMA issuance for the RMA to remain valid. Ventex may elect to provide replacement product or repair, at its own discretion, once verification of the defective product is determined. Ventex's liability on any claim shall never exceed the purchase price of the specific product which gives rise to the claim.

THE FOREMENTIONED IS IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL VENTEX BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES OR LIABILITY, TRANSPORTATION, INSTALLATION OR SUBSTITUTION COSTS, DELAYS, OR FOR ANY OTHER DAMAGES, COSTS, OR EXPENSES INCURRED, IRRESPECTIVE OF HOW THEY OCCUR.

There are no warranties, obligations and/or liabilities on the part of Ventex, whether for products, services or otherwise, which extend beyond the description mentioned in this document. No employee or representative of Ventex other than the President (by written, signed document) is authorized to change or expand this warranty in any way, or to grant any other warranty. No waiver of any term of this warranty by Ventex shall be deemed to imply any continuing or repeated waiver thereof.

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