The UNT series is a universal transformer and can be used as a replacement for individual 30mA transformers. Available in 120 volts. All UNT Tank® Service Pro™ neon transformers come with a secondary ground fault protection bypass switch. This feature will aid the service technician in troubleshooting secondary side installation problems by temporarily disabling the secondary ground fault protection for up to 29 minutes. After 29 minutes, the SGFP circuit reverts to normal mode while the unit remains on. Turn the power "off" and then "on"; the SGFP is now restored automatically.

Our unique Tri-LED sensor lamp gives the user a visual indicator for easy operation. The transformer signals function mode changes automatically: green (on); red (SGFP trip to off); and amber (SGFP bypass). Blinking green: 3 times = reversed polarity; 4 times = ungrounded.

Replace the transformers with the following voltage ratings:

- UNT1512N3G: 10,500 – 15,000 volts
- UNT912N3G: 4,500 – 9,000 volts

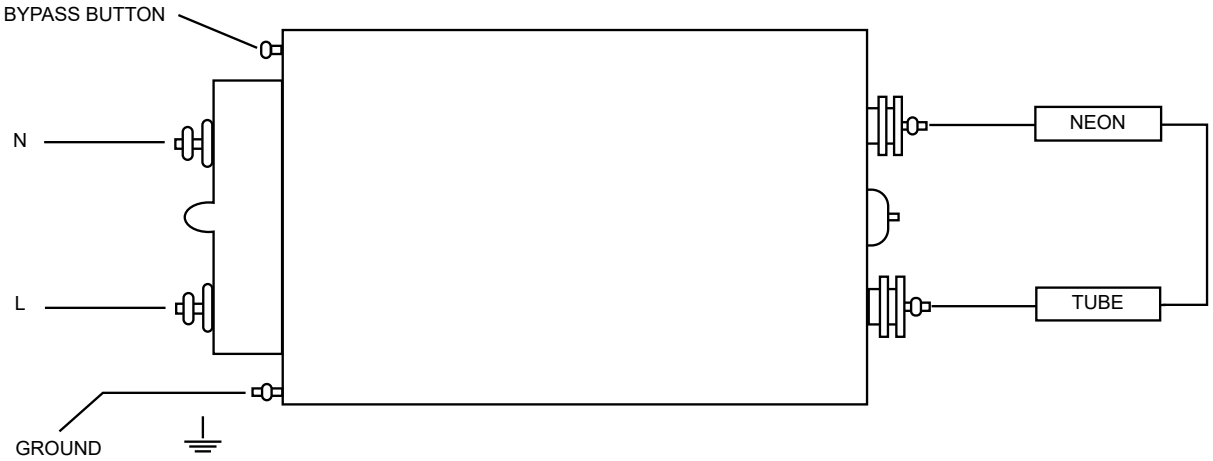
Be sure to:

- Mount transformer securely. Use star washer to bond the base plate to the sign enclosure.
- Polarized transformer, line and neutral are marked as required by UL
- A proper ground should be present and connected to the terminal marked
- Make sure the identified Midpoint Return ("RETURN") terminal is not connected to any ground
- First determine that power is removed from transformer if ground fault occurs. The transformer will automatically make 3 attempts within 10 seconds to reset.
- **See recommended secondary wiring methods on reverse side and select the method best suited for your application. Remember, keep length of GTO from transformer to first connection as short as possible.**
- Outdoor Type 2 transformer – an additional metal enclosure is required for all locations

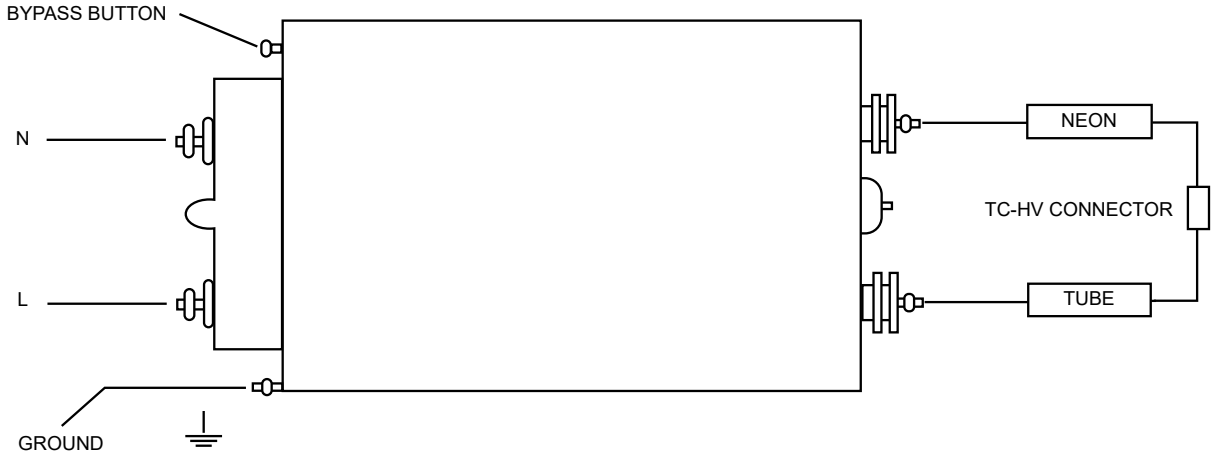
Revised Luminous Tube Chart

Transformer Size Specifications		Normal Average Number of Feet of Tubing Operated													
Open Circuit Secondary Voltage (Volts)	Short Circuit Secondary Current (mA)	Red Neon, Clear or Fluorescent Tube Size, Millimeters							Mercury-Filled Tubes, Clear or Fluorescent All Colors for All Applications Tube Size, Millimeters						
		15	14	13	12	11	10	9	15	14	13	12	11	10	9
15,000	60 30	60 60	54 54	50 50	46 46	43 43	40 40	38 38	72 72	65 65	60 60	55 55	51 51	48 48	45 45
12,000	60 30	46 46	42 42	38 38	35 35	33 33	31 31	28 28	55 55	50 50	46 46	42 42	39 39	37 37	34 34
10,500	60 30	39 39	36 36	34 34	31 31	28 28	25 25	22 22	48 48	43 43	40 40	37 37	33 33	30 30	27 27
9,000	60 30	33 33	30 30	28 28	26 26	24 24	23 23	21 21	40 40	36 36	33 33	31 31	29 29	28 28	25 25
7,500	60 30	27 27	25 25	23 23	22 22	20 20	19 19	18 18	33 33	30 30	28 28	26 26	24 24	23 23	21 21
6,000	60 30	22 22	21 21	19 19	18 18	16 16	15 15	14 14	27 27	25 25	23 23	21 21	19 19	18 18	17 17
5,000	60 30	18 18	17 17	15 15	14 14	13 13	13 13	12 12	22 22	20 20	18 18	17 17	16 16	15 15	14 14
4,000	60 30	15 15	13 13	13 13	12 12	11 11	10 10	9 9	18 18	16 16	15 15	14 14	13 13	12 12	11 11
3,000	60 30	11 11	10 10	9 9	8 8	8 8	8 8	7 7	13 13	12 12	11 11	10 10	9 9	9 9	8 8
Recommended gas pressure MM/Hg		9	10	10	11	12	13	15	9	10	10	11	12	13	15
Revised based on (1) average grade of tubing, (2) correct gas pressure, (3) High Voltage Cable (GTO 15) restricted to length of cable of transformer, (4) primary voltage supply at 120 volts ±10%.		The above chart is a guideline. More accurate data can only be obtained if you load by instrument. An A/C milliammeter (0-75 mA) can be obtained from your nearest Ventex distributor.							Deduct approximately one (1) foot from the above figures for each pair of electrodes. Add 10% to the recommended gas pressure measured in MM/Hg when the length of the tube is less than ten (10) feet.						

STANDARD SERIES WIRING METHOD



VIRTUAL WIRING METHOD



MIDPOINT RETURN WIRING METHOD

THE GROUND REFERENCED OUTPUT MIDPOINT RETURN TERMINAL IS MARKED “RETURN.” THE “RETURN” TERMINAL IS NOT LIMITED TO THE LENGTH RESTRICTIONS SPECIFIED IN THE STANDARD FOR ELECTRIC SIGNS, UL 48, FOR THE OUTPUT LEAD. DO NOT CONNECT RETURN WIRING TO THE SERVICE GROUND TERMINAL OR TRANSFORMER ENCLOSURE.