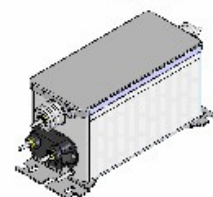




UNI-SERVE Conventional and Enclosed Transformer Installation Instructions (BPX/CPX/FPX) 120V.

UL2161 Secondary Ground Fault Protection
Outdoor Type 2 and Type 4

Transformers carrying the logo are listed in accordance with UL 2161. Transformers provide additional safety for the installation of high voltage luminous tube signs, and are in accordance with NEC article 600. For ease of installation and service, these transformers maintain the same mounting configuration and size as our older models.



CONVENTIONAL

INSTALLATION

(1) Location

This is an Outdoor Non-Weatherproof transformer. Do not install the transformer in places that will be directly exposed to rain. Use prudent installation methods, in accordance with UL48 and applicable local codes. If water gets inside the transformer, it will cause the transformer to break down and create an electrical hazard.

(2) Mounting

Transformer must be mounted securely using mechanical fasteners. Failure to properly secure the transformer will create an unsafe installation.

(3) Polarity

L and N embossing is provided, and MUST be followed

(4) Grounding

A ground terminal is provided on the transformer and must be connected to a grounded conductor. In addition, make sure that there is a secure bond (connection) between the transformer and the sign enclosure.

SECONDARY GROUND FAULT PROTECTION

This transformer monitors the secondary circuit and will detect abnormalities in order to interrupt the primary power if either of the following two conditions are detected:

- Short circuit to ground at the secondary circuit
- Arcing from the secondary circuit to ground
- Missing ground detection

RESTORING UNIT TO NORMAL OPERATION

If the transformer shuts down the primary power, restore it in the following order:

1. Switch off the primary power
2. Visually inspect the application looking for any abnormal and/or unsafe conditions
3. Correct any abnormal conditions if found
4. Carefully restore the primary power
5. If trip conditions persist, the service button is provided to help isolate the source of the abnormal conditions while the unit is operating. Caution: While in service mode, the ground fault circuit will not shut the unit down.

WarningHigh voltage may be present. Ensure that the primary power is disconnected before any inspection or repair is attempted. Failure to disconnect the primary circuit could create a serious electrical shock.

FEATURES

1. Service Button

Allows the secondary ground fault protection (SGFP) mode to be bypassed for approximately 30 minutes. Note: The LED will blink red if the unit has tripped, and is not properly grounded. To prevent an electrical shock hazard, the unit will not enter bypass mode while improperly grounded.

2. Auto-Reset

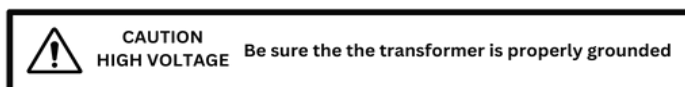
The transformer will attempt to reset itself 3 times. The reset feature will help avoid nuisance tripping. The reset interval is approximately 3 seconds.

3. LED Diagnosis

Diagnostics & Bypass Operation

- LED Off = Normal Operation
- LED ON = Transformer in bypass service mode
- 2 Flashes, Pause = Transformer case missing service ground
- Continuous Flashing = Secondary fault or case missing service ground
- 1 Flash long Pause = Overheated Transformer

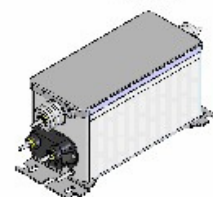
NOTE: Reference voltage check off box is provided for future replacement. Check off the appropriate box for lamp footage.



Customer Service: Phone: 1 (800) 661-7251 Email: cservice@allanson.com



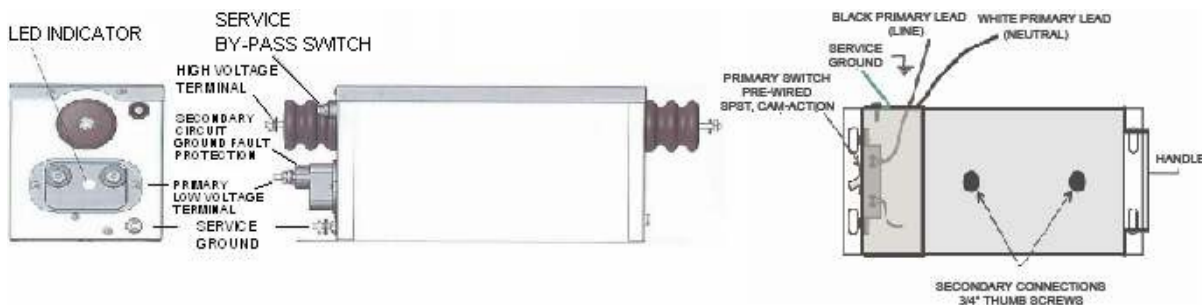
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CONVENTIONAL

UL2161 Secondary Ground Fault Protection Outdoor Type 2 and Type 4

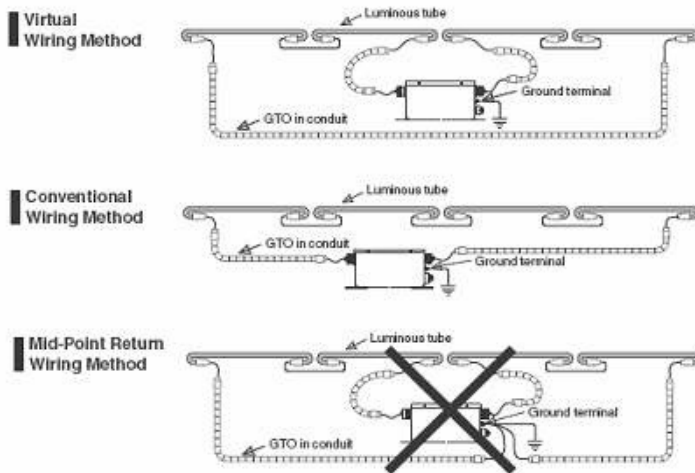
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CAUTION Be certain power is actually off, and that the unit is not in Auto-Reset mode.

SECONDARY WIRING METHODS

Virtual and conventional wiring methods can be used, but do not attach the secondary wiring to any grounded part of the unit under any circumstances.



CAUTION: No mid-point return connection is provided. DO NOT CONNECT ANY SECONDARY WIRING TO THE GROUND TERMINAL.

TUBE LOADING

Use an appropriate length of tube loading, according to the secondary voltage of the transformer. Refer to the following chart to ensure that the right tubing length is being used.

LUMINOUS TUBE FOOTAGE CHART																			
Model Secondary Range	Transformer Rating		Tubing Type	Neon Filled Tubing									Mercury and Argon Filled Tubing						
	Open Circuit Secondary Voltage (V)	Short-Circuit Secondary Current (I)		Dia. (mm)	18	15	14	13	12	11	10	9	18	15	14	13	12	11	10
	10,500-15,000	15000	30/60	Tube Length (ft.)	48-72	39-60	36-54	34-50	31-45	26-39	22-33	18-27	54-80	48-72	43-64	40-60	37-54	32-47	26-40
5,000-9,000	9,000	19-40			17-33	16-30	15-29	12-26	10-22	9-19	7-15	22-45	19-40	19-36	16-33	14-31	12-26	11-23	8-18
Recommended Gas Pressure (mm/Hg)				8	9	10	10	11	12	13	15	8	9	10	10	11	12	13	15
For each pair of electrodes, reduce approximately 1 foot from the above figures.																			
Add 10% to the recommended gas pressure (mm/Hg) when the length of tubing is less than 10 feet.																			
The above figures are based on installation using total 20 feet of high voltage cable. Longer cable requires shorter tube footage.																			



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