

# INDOOR VOLTAGE TRANSFORMER

Model PT6-1-125  
ANSI Groups 4A & 4B

REGULATORY AGENCY APPROVALS



**ACCURACY CLASS:**

0.3 WXYZ, 1.2ZZ at 100% rated voltage with 120V based ANSI burden. 0.3 WXY, 1.2Z at 58% rated voltage with 69.3V based ANSI burden.

**FREQUENCY:**

60 Hz.

**MAXIMUM SYSTEM VOLTAGE:**

25.5 kV, BIL 125kV full wave.

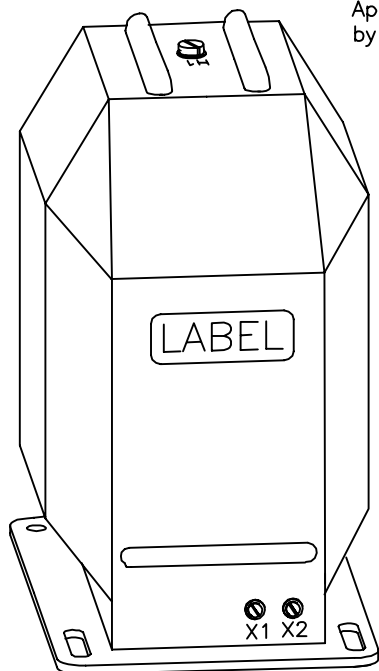
**THERMAL RATING:**

1500 VA at 30°C. amb.  
1000 VA at 55°C. amb.

**WEIGHT:**

Approximately 125 lbs.

Approved for revenue metering in Canada by Industry Canada, Approval No. AE-0676



- Primary terminals are 3/8–16 brass screws with one flatwasher and lockwasher.
- Secondary terminals are 1/4–20 brass screws with one flatwasher and lockwasher.
- The core and coil assembly is vacuum encapsulated in polyurethane resin.
- The transformers are tested for partial discharge to Canadian Standards CAN 3–C13–M83. This test can also be carried out to IEC requirements if requested.
- Thermal burden rating is for 120 volt secondaries.
- Plated steel mounting base.
- A primary fuse is not supplied, but is recommended. Use a 25kV, 0.5E rated fuse for primary ratings of 13000 volts or greater and 1.0E for those rated less than 13000 volts. \*
- A test card is provided with each unit.

## ONE BUSHING

|  | GROUP | PRIMARY VOLTAGE (a) | RATIO | SECONDARY VOLTAGE | CATALOG NUMBER | R <sub>FR</sub> (b) |
|--|-------|---------------------|-------|-------------------|----------------|---------------------|
|  |       | 4A                  | 10200 | 85:1              | 120            | PT6-1-125-1022      |
|  | 4A    | 12000               | 100:1 | 120               | PT6-1-125-123  | 82 ohms             |
|  | 4A    | 13200               | 110:1 | 120               | PT6-1-125-1322 | 82 ohms             |
|  | 4A    | 13800               | 115:1 | 120               | PT6-1-125-1382 | 82 ohms             |
|  | 4A    | 14400               | 120:1 | 120               | PT6-1-125-1442 | 82 ohms             |
|  | 4B    | 18000               | 150:1 | 120               | PT6-1-125-183  | 82 ohms             |
|  | 4B    | 21000               | 175:1 | 120               | PT6-1-125-213  | 82 ohms             |
|  | 4B    | 24000               | 200:1 | 120               | PT6-1-125-243  | 82 ohms             |

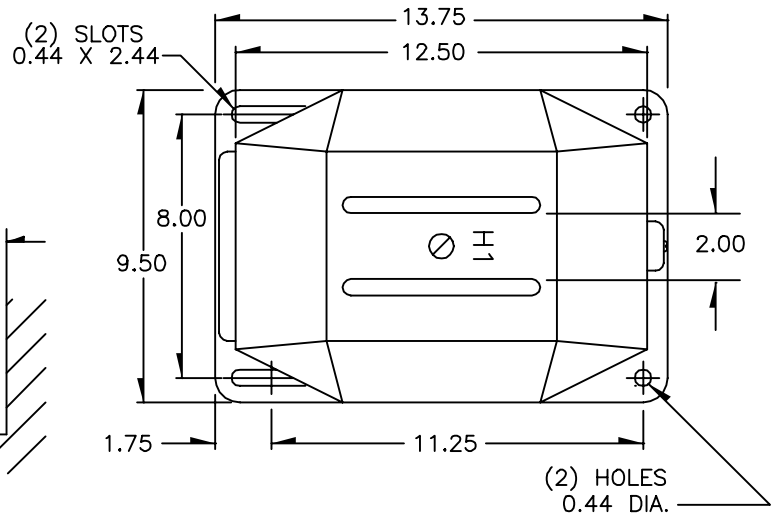
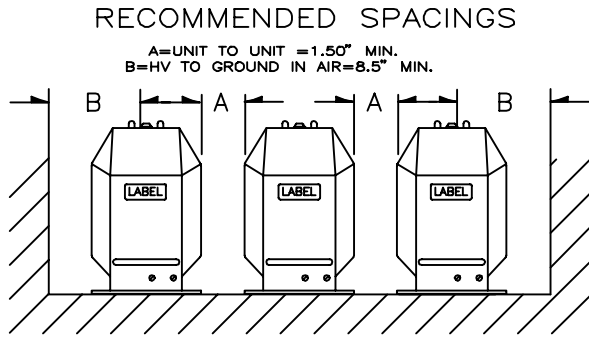
(a) Also available are other ratios and frequencies, double secondaries and units meeting IEC 44-2 rated voltage factors of 1.50 or 1.90.

(b) See page 4, item 2 for ferroresonance considerations.

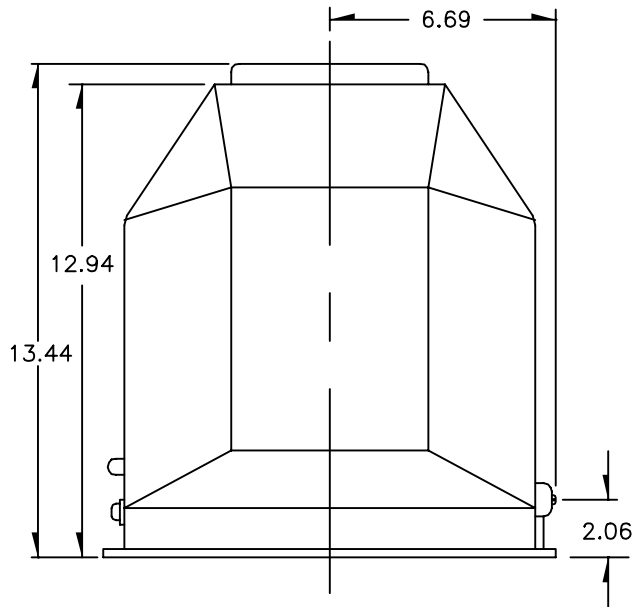
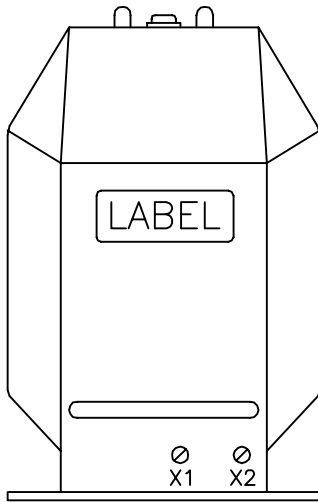
\* SEE PAGE 4, Primary Fuse Rating

NOTE: Voltage transformers connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta. Transformers may be connected line-to-neutral on a system rated 25,500 volts grounded wye. It is recommended that the system line-to-line voltage not exceed the transformer maximum system voltage level.

# PT6-1-125



Recommended spacings are for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge; high altitude; and other considerations like configuration.



## CIRCLE DIAGRAM

The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.

