



Inductive Voltage Transformer

Application

The VTO-DB-250 is an outdoor, inductive voltage transformer suitable for metering -- applications on 27,600 L-G and 46,000 L-L volt systems at 250 kV BIL, at 60 Hz. Two bushings provide for line to line and line to ground application depending on the model ordered.

Fabrication

All ITEC transformers utilize high permeability, low loss, grain orientated silicon steel cores to optimize performance and physical size of the transformers.

Transformer tanks and expansion chambers are manufactured from mild steel and finished with the latest powder coating technology to withstand the most rigorous environmental conditions. Standard finish color is ANSI 70 light Gray.

All VTO's are hermetically sealed, full vacuum assemblies provided with a dry nitrogen cushion.

One-piece, wet processed porcelain bushings are used on all VTO's. Bushings are designed to exceed IEEE standards for creep and strike distances. The standard bushing color is ANSI 70 light Gray.

The primary terminals are a 4-hole NEMA pad, suitable for use with copper or aluminum bus connections. The secondary connections are ¼"-20 copper studs with hardware located in a weatherproof, hinged cover, terminal box with three (3) conduit knockouts suitable for 1-½" conduit hubs. All VTO's are equipped with a stainless steel, NEMA 2-hole ground pad.

All VTO's are equipped with a magnetic oil level gauge, ½" drain valve, ½" oil fill plug and pressure relief valve.

Accuracy

VTO-DB-250's are designed to provide 0.3% accuracy class when loaded with IEEE burdens of W, X, Y, Z and ZZ.

Magnetic Circuits

The VTO-DB-250 is available in single and dual ratio with taps depending on the model ordered.



Mounting

The VTO-DB-250 is designed for mounting on substation structures.

Seismic Rating

The VTO-DB-250 has been qualified through Dynamic Analysis to withstand High Level per IEEE 693-2005.

Testing

Every transformer is tested in accordance with IEEE Standard C57.13 (latest revision). Standard tests include applied and induced voltage, accuracy, polarity, dissipation factor and partial discharge. All transformers are guaranteed to be partial discharge free at 135% of nominal system voltage.

Options

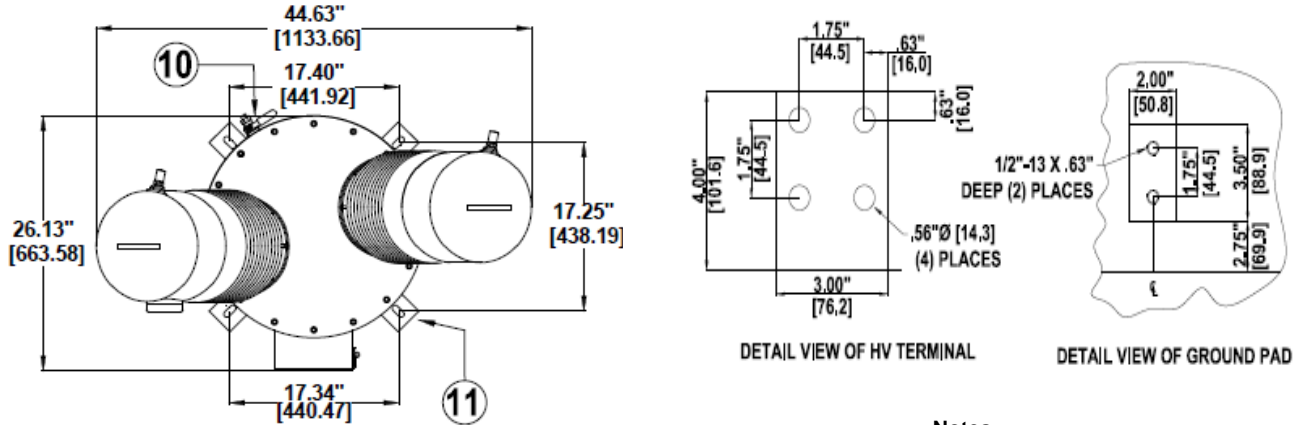
- Stainless Steel Tank and/or Expansion Chamber.
- Extra Creep Bushings

Product Data
 VTO-DB-250
 Voltage Transformer
 46 kV Class
 250 kV BIL



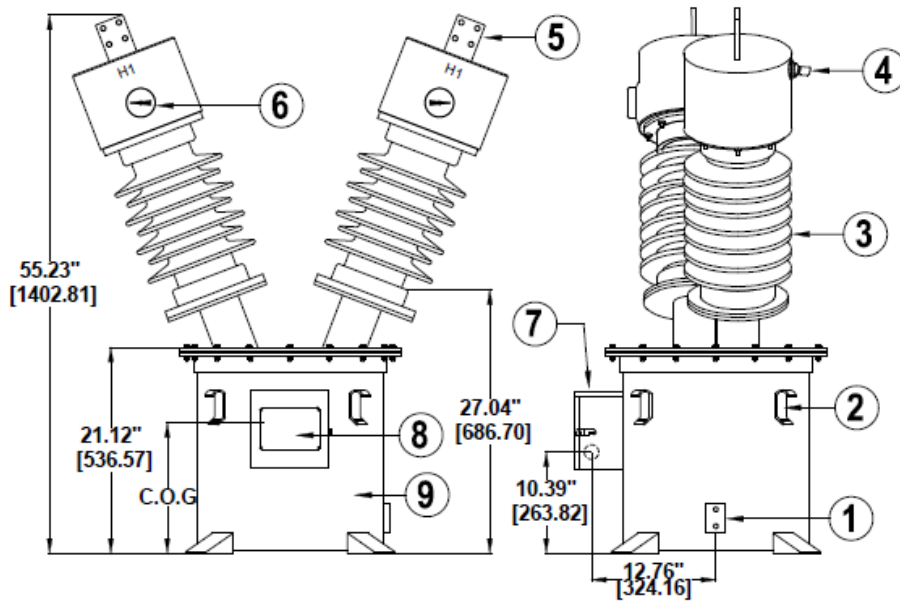
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Dimensions and Details



Notes:

1. NEMA 2- hole Ground Pad
2. Lifting Lugs
3. Porcelain Insulators
4. 3/4" NPT Vacuum Port and 1/4" PRV
5. Primary 4 Hole NEMA Terminal Pad
6. Oil Level Indicator
7. Secondary Terminal Box with three 1.5" hubs
8. Stainless Steel Nameplate
9. Mild Steel Tank
10. 1/2" Drain Valve
11. Mounting Foot



VTO-DB-250

250 kV BIL
 Weight: 745 pounds
 Gallons Oil: 30
 Creep Minimum: 37.0 inches
 Strike Minimum: 15.0 inches

Primary Voltage L-G & L-L	Secondary Voltage	Winding Ratio	Thermal Rating	0.3 Accuracy Class / Burden Ratings	Catalog Number
27600 & 46000	115/69.00 & 115/66.4:1	240/400 & 400/693:1	5000 VA	W, X, Y, Z, ZZ	VA202500693T000
46000	115	400:1	5000 VA	W, X, Y, Z, ZZ	VA202500300S000

This information is subject to change without notice.
 ITEC is not responsible for typographical errors.

Other ratings and options may be available
 Please contact the factory with your requirements.

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