



**Westinghouse Electric Corporation**  
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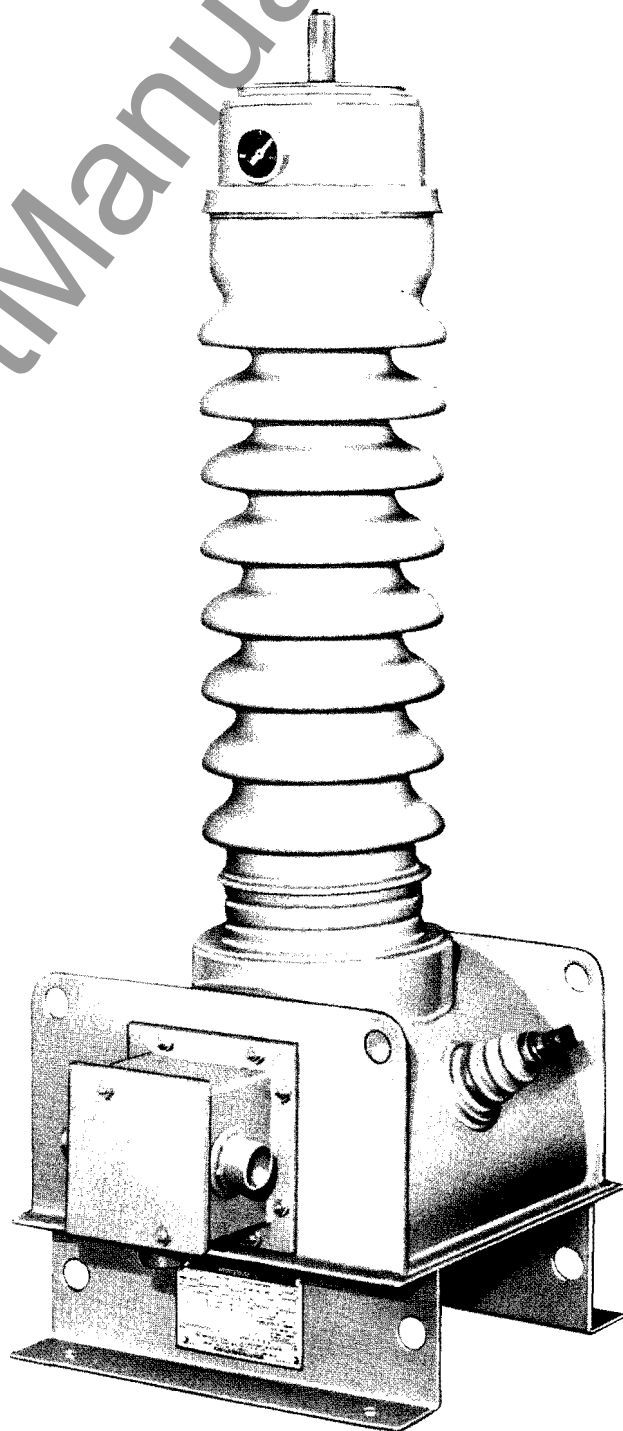
Product Bulletin  
**44-393**

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August 18, 1982  
New Information  
Mailed to: E, D, C/2048/DB

350 Kv BIL for 69 Kv GRD Wye  
Outdoor, 60 Hertz

## **Type LPT Voltage Transformer**



### Application

The LPT is an oil filled outdoor potential transformer designed for metering and relaying applications. It is available only in the single bushing design for use on three phase, four wire ground wye systems.

### Accuracy

ANSI metering accuracy class:

X<sub>1</sub>-X<sub>3</sub>, 115 volts, 0.3 class, 0 thru ZZ burden

X<sub>2</sub>-X<sub>3</sub>, 67.08 volts, 0.3 class, 0 thru Z burden

Y<sub>1</sub>-Y<sub>2</sub>, 115 volts, 0.3 class, 0 thru Z burden

### Design Features

#### Small Size, Low Weight

A form fit tank, coupled with a continuous, layer wound coil, results in a unit with only 56 inches overall height and less than 400 pounds in weight.

#### Core and Coil

A continuous, layer wound primary coil is wound directly over the secondary coils and assembled with two Hipersil core loops. The high voltage lead is covered with solid insulation and paper tape to form the central part of the internal bushing assembly.

#### Secondary Conduit Box

A removable, weather-proof secondary junction box is furnished, with provisions for 3 - 1½" conduit connections. The box mounts around a molded secondary terminal block having ⅝-18 threaded terminal studs.

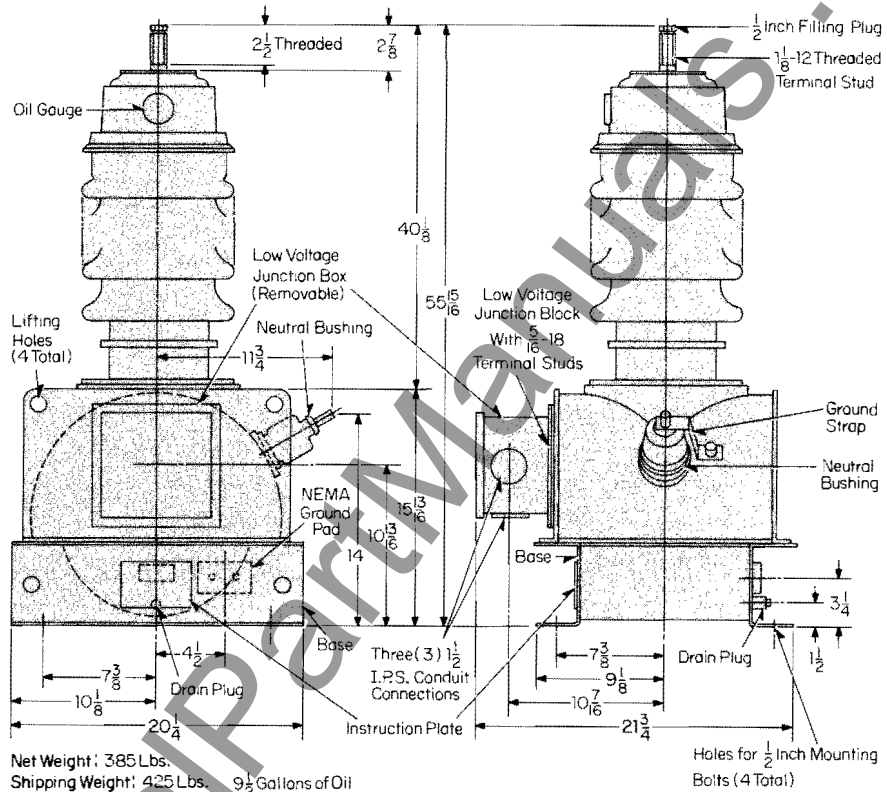
#### Color

The complete unit, including the primary porcelain, is standard #70 gray.

#### Further Information

Prices P.L. 44-321.

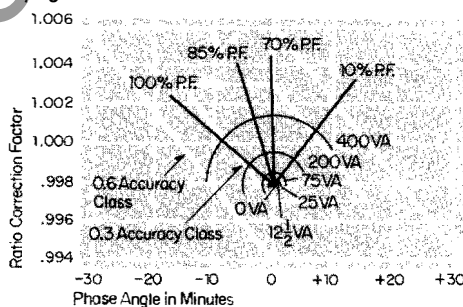
### Dimensions and Weights



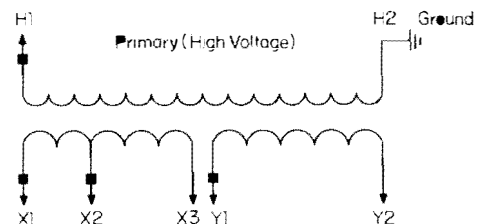
### Performance Curves

Typical ratio correction factors and phase angle values plotted for standard burdens, using the Farber Method ("The Analytical and Graphical Determination of Complete Potential Transformer Characteristics" - Settles, Farber, Conner - AIEE Transaction Paper 60-1246 October, 1960).

X<sub>1</sub>-X<sub>3</sub> (115 Volts)



### Wiring Diagram



With rated primary voltage applied on the high voltage winding, X<sub>1</sub>-X<sub>3</sub> and Y<sub>1</sub>-Y<sub>2</sub> will provide 115 volts. The tapped portion of the secondary (X<sub>2</sub>-X<sub>3</sub>) will provide 67.08 volts.

### Selector Guide

BIL Kv	Normal Circuit Voltage	Winding Ratios		Transformer Voltages			Thermal Rating, VA		ANSI Minimum HV Bushing Creep (Inches)	Style Number
		Primary to X Winding	Primary to Y Winding	Primary	X Winding	Y Winding	All on One Secondary Winding	Divided Between Both Windings		
350	69000	600/350:1	350:1	40250	67.08/115	115	4000	5000	48	4300A69G04