



# RITZ INSTRUMENT TRANSFORMERS, INC.

*Instrument Transformers*

## Voltage Transformers

**VEF 25-10 Single Pole**  
**VZF 25-10 Double Pole**

### General Description

Ritz manufactures an extensive line of cast epoxy resin insulated transformers across the voltage range of 5.5 kV to 72.5 kV. This brochure describes outdoor Voltage Transformers in the 25kV class with performance ratings coinciding with industry standard product offerings. Ritz, because of product depth, familiarity with international standards and custom design capability can also design a solution to your specific needs.

### Construction

The core and coil assembly is encapsulated in cycloaliphatic epoxy resin in a single process, performed under vacuum, using the pressure gelation method. The resin color is grey. Brown is available by special order. Epoxy resin was chosen because of its excellent tracking resistance, high mechanical strength, ability to withstand ultraviolet radiation, superior weathering characteristics and its noncombustibility.

### Primary Terminals

Primary line terminals are tin plated copper studs with connectors capable of accommodating #10 to #1 AWG conductor. The H2 neutral terminal on single bushing models is insulated to withstand a 19 kV test level. Line terminals are detachable so that alternate terminal configurations can be considered.

### Secondary Terminals

Secondary terminals are bronze clamp type with a large diameter hole. A ground terminal is also provided for grounding of the secondaries at the transformer.

### Terminal Box

The cast aluminum terminal box has one inch conduit hubs on both ends and a knock out for a one inch conduit fitting on the bottom. The box is attached to the transformer body by four bolts in an industry standard pattern and can easily be detached, simplifying change out procedures.



### Base Plate

The base is made of marine grade aluminum and is securely attached to the transformer body. Industry standard mounting dimensions and a single hole ground pad 90° to the mounting plate are provided.

### Nameplates

Nameplate data is engraved on blackened stainless steel plates.

### Mounting

The transformers can be mounted in the horizontal, vertical or suspended position.

### Tests

Routine tests in compliance with IEEE are standard. In addition internal partial discharge is performed as a routine test with acceptance criteria of < 20pC at 1.2Vm/√3 and < 50pC at 1.2 VM. Test cards are included with each unit.

### Commissioning and Maintenance

Transformers are supplied ready for service. No special tools are required. Instruction manuals are provided with each shipment. Periodic wiping down of the units with silicone grease is recommended.

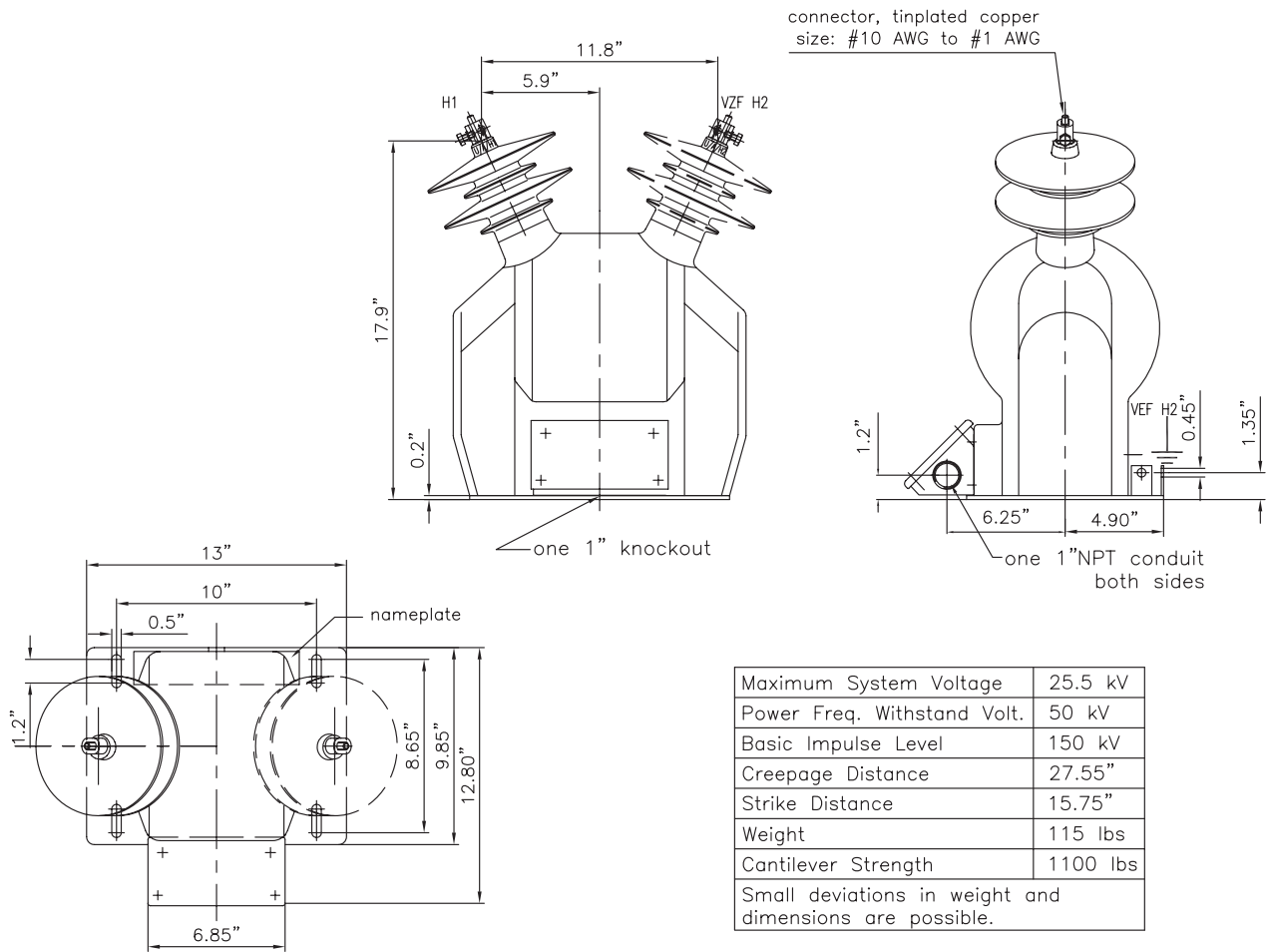


**Voltage Transformer Type :VEF 25-10**

Primary Voltage (V)	Winding Ratio	Catalog Number	IEEE Accuracy Class, 60HZ	Thermal Rating (VA)
12000/20750 GY	100:1	122031010 60342	0.3 WXYZ	2000
13200/23000 GY	110:1	122031010 70974	0.3 WXYZ	2000
14400/24940 GY	120:1	122031010 60343	0.3 WXYZ	2000

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12000/20750 Y	100:1	122030010 60350	0.3 WXYZ	2000
14400/24940 Y	120:1	122030010 60351	0.3 WXYZ	2000
18000/18000 Y	150:1	122030010 60352	0.3 WXYZ	2000
24000/24000 Y	200:1	122030010 60353	0.3 WXYZ	2000



Maximum System Voltage	25.5 kV
Power Freq. Withstand Volt.	50 kV
Basic Impulse Level	150 kV
Creepage Distance	27.55"
Strike Distance	15.75"
Weight	115 lbs
Cantilever Strength	1100 lbs
Small deviations in weight and dimensions are possible.	



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