RITZ INSTRUMENT TRANSFORMERS, INC.

Instrument Transformers

Voltage Transformers

VEF 15-09 Single Pole
VZF 15-09 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 15kV 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 noncumbustibility.

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 black laser-etched on stainless steel plates.

Mounting

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

Tests

Routine tests in compliance with IEEE and CSA are standard. 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.

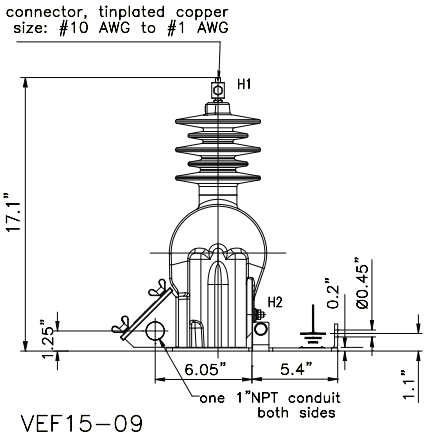
Voltage Transformer Type: VEF 15-09

Primary Voltage (V)	Winding Ratio	Catalog Number	IEEE Accuracy Class, 60HZ	Thermal Rating (VA)
2400/4160 GY*	20:1	121531009 395000	0.3WXY	1000
4200/7280 GY*	35:1	121531009 395001	0.3WXY	1000
4800/8320 GY*	40:1	121531009 395002	0.3WXY	1000
7200/12470 GY	60:1	121531009 395003	0.3WXY	1000
7620/13200 GY	63.5:1	121531009 395004	0.3WXY	1000
7970/13800 GY	66.42:1	121531009 395005	0.3WXY	1000
8400/14400 GY	70:1	121531009 395006	0.3WXY	1000

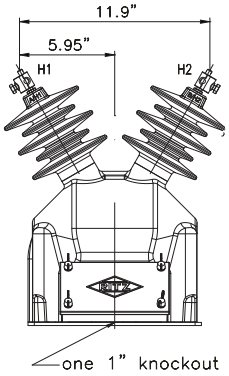
Voltage Transformer Type: VZF 15-09

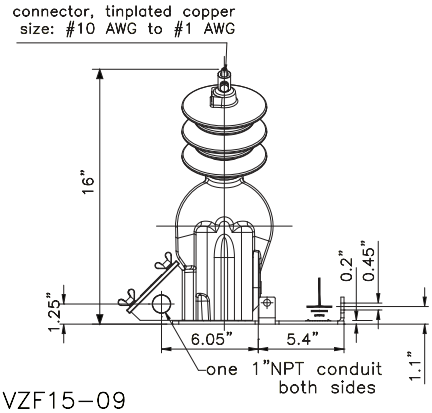
Primary Voltage (V)	Winding Ratio	Catalog Number	IEEE Accuracy Class, 60HZ	Thermal Rating (VA)
2400/4160 Y*	20:1	121530009 395007	0.3WXY	1000
4800/4800 Y*	40:1	121530009 395008	0.3WXY	1000
7200/12470 Y	60:1	121530009 395009	0.3WXY	1000
7620/13200 Y	63.5:1	121530009 395010	0.3WXY	1000
8400/14400 Y	70:1	121530009 395011	0.3WXY	1000
12000/12000 Y	100:1	121530009 395012	0.3WXY	1000
13200/13200 Y	110:1	121530009 395013	0.3WXY	1000
14400/14400 Y	120:1	121530009 395014	0.3WXY	1000

*75 kV BIL



VEF15-09





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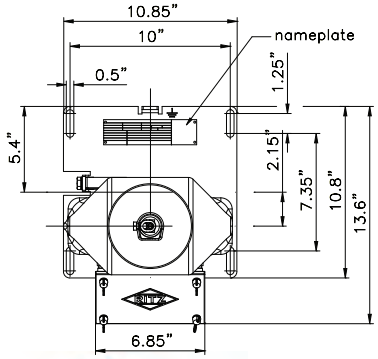

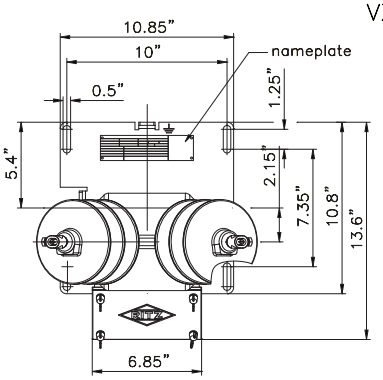

Maximum System Voltage	15.5 kV
Power Freq. Withstand Volt.	34 kV
Basic Impulse Level	110 kV
Creepage Distance	24.85"
Strike Distance	12.2"
Weight	52/55lbs
Cantilever Strength	1100 lbs
Small deviations in weight and dimensions are possible.	

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