



*Instrument Transformers*

## Voltage Sensors

### VRF15-01

#### General Description

Ritz manufactures an extensive line of epoxy resin insulated instrument transformers and sensors across the voltage range of 5.5 kV to 72.5 kV. This brochure describes outdoor voltage sensors in the 15 kV class. Ritz, because of product depth, familiarity with international standards, and custom design capability can also design a solution specific to your needs.

#### Construction

A resistive voltage divider assembly is encapsulated in cycloaliphatic epoxy resin in a single process, performed under vacuum, using the pressure gelation method. The resin color is grey. 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

The primary line terminal and neutral/ground terminal are 3/8-inch threaded studs with a clamping washer and tightening nut. The terminals are designed to accept conductors ranging from #10 to 2/0.

#### Secondary Terminals

Secondary terminals are made available through a MIL-DTL-5015 threaded type connector rated for harsh environments.

#### Secondary Cabling

Secondary cable assemblies are available in various lengths. Standard cable assemblies come with a MIL-DTL-5015 threaded type connector suitable for connecting to the standard connector supplied with the sensor. The sensor is designed to meet the rated accuracy when used with cable assembly lengths up to 50 feet. Secondary connections and cable assembly designs can be customized for specific applications.



#### Mounting

The sensor can be mounted in the vertical, horizontal, or suspended position. A 3/4-inch - 10 UNC mounting insert is provided on the bottom of the unit. An optional aluminum mounting bracket is also available.

#### Nameplate

Nameplate data is laser-etched on a metallic plate which is affixed to the unit.

#### Tests

Routine tests in compliance with IEEE and CSA, including partial discharge, are standard. Test cards are included with each unit.

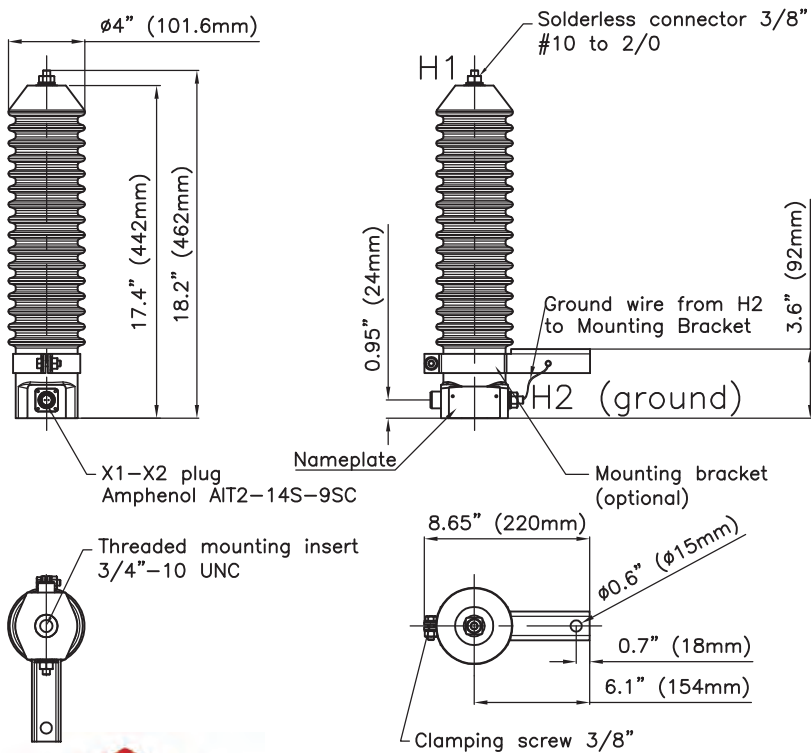
#### Commissioning and Maintenance

The sensor is supplied ready for service. No special tools are required. Instruction manuals are provided with each shipment.



**Voltage Sensor Type: VRF 15-01**

Rated Primary Voltage (V)	Rated Secondary Voltage (V)	Ratio	Accuracy	Rated Load/Burden	Catalog Number
7200	120	60:1	1%	1MΩ	121550001.395015
7200	120	60:1	1%	2MΩ	121550001.395016
7200	120	60:1	1%	5MΩ	121550001.395017
7200	120	60:1	1%	0.5MΩ	121550001.395018
7200	120	60:1	1%	0.24MΩ	121550001.395019
7620	120	63.5:1	1%	1MΩ	121550001.395020
7620	120	63.5:1	1%	2.2MΩ	121550001.395021
7620	120	63.5:1	1%	0.24MΩ	121550001.395022
7970	120	66.42	1%	1MΩ	121550001.395023
7970	120	66.42	1%	0.24MΩ	121550001.395024
8300	120	69.17:1	1%	0.24MΩ	121550001.395025
6900	120	57.5:1	1%	1MΩ	121550001.395026
6000	120	50:1	1%	2.2MΩ	121550001.395027
6600	120	55:1	1%	1MΩ	121550001.395028
7200	5.1	1412:1	1%	1MΩ	121550001.395029
7200	3.3	2182:1	1%	1MΩ	121550001.395030
7200	3.3	2182:1	1%	0.5MΩ	121550001.395031



Optional Mounting Bracket: Cat# AMB00001  
 Cable Assembly (Includes MIL Connector):  
 Cat# ASC00001 - 10 feet  
 Cat# ASC00002 - 20 feet  
 Cat# ASC00003 - 30 feet  
 Cat# ASC00004 - 40 feet  
 Cat# ASC00005 - 50 feet

Maximum System Voltage	15.5 kV
Power Freq. Withstand Volt.	34 kV
Basic Impulse Level	110 kV
Creepage Distance	21.1"
Strike Distance	13.8"
Weight	12 lbs
Small deviations in weight and dimensions are possible.	



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