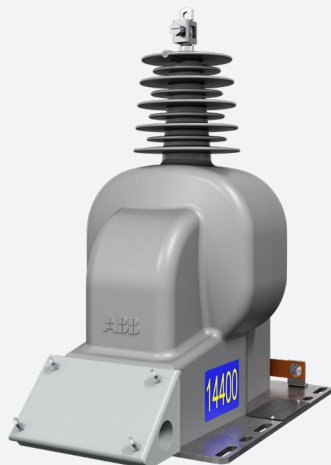


INSTRUMENT TRANSFORMERS WITH ABB RESIVOLT™ TECHNOLOGY

VRO-150G

Outdoor voltage transformer



Product features

- 25 kV, outdoor
- 150 kV BIL, 60 Hertz
- Strike: 16.6" (422 mm)
- Creep: 38" (965 mm)
- Minimum operating temperature: -50 °C
- Approximate weight: 115 lbs (52 kg)

Application and industry-leading performance

Distribution networks continue to evolve due to increased instances of distributed energy resources (DER), EV charging, vacuum switching and the like. This creates a challenge for utilities, especially as these applications bring unintended changes to the network paradigm. The VRO-150G incorporates new and innovative technology, reflecting improvements designed and tested to overcome these disruptive network system challenges with enhancements such as:

- A new core design that improves the transformer response to DC voltage. The unintended presence of a DC voltage can cause a transformer core to prematurely saturate. When this happens, the core temperature may increase to levels that could degrade the transformer insulation.
- Larger core and wire size to withstand overvoltage conditions — especially important in critical applications, such as data centers.

The VRO-150G line-to-ground voltage transformer (VT) is part of ABB's new VT offering. The VRO-150G combines a new core and winding design with ResiVolt™ very fast transient (VFT) resistant technology, to mitigate the effects of distribution network challenges such as ferroresonance and VFT overvoltages.

- Additional core modifications to strengthen low order harmonic and ferroresonance resistance.
- ResiVolt technology, which helps improve VFT withstand capability in applications where increased line switching is present, making it ideal for recloser and renewable energy applications.
- Encapsulation in advanced HCEP (hydrophobic cycloaliphatic epoxy) material, providing unparalleled performance in outdoor applications, including wet, polluted or coastal environments.

Terminals

- The electro-tin-plated primary H1 bushing terminal accommodates #10 to 250 MCM conductors.
- The H2 neutral terminal is insulated to withstand a 19 kV test level and can be disconnected from the external ground cable for power factor measurement.
- Clamp-type secondary terminals accommodate #14 to #3 wire.

Mounting and baseplate

- The unit can be mounted in upright, cantilever or upside-down positions.
- Stress-relief devices should be used to support cable connections.
- The base is constructed of corrosion-resistant aluminum and secured to the encapsulated base support.

Junction box

The junction box has a one-inch conduit hub on either end and a knock out for a one-inch conduit fitting on the bottom.

Test reports

Test reports are stored electronically and can be emailed in various formats at the time of shipment.

Standards

- This unit meets or exceeds all requirements of IEEE C57.13-2016 and can be tested to other standards as requested.
- Meets CAN/CSA 411.1, Clause 6.6 requirements for basic impulse and fast impulse transient withstand voltage.

Warranty

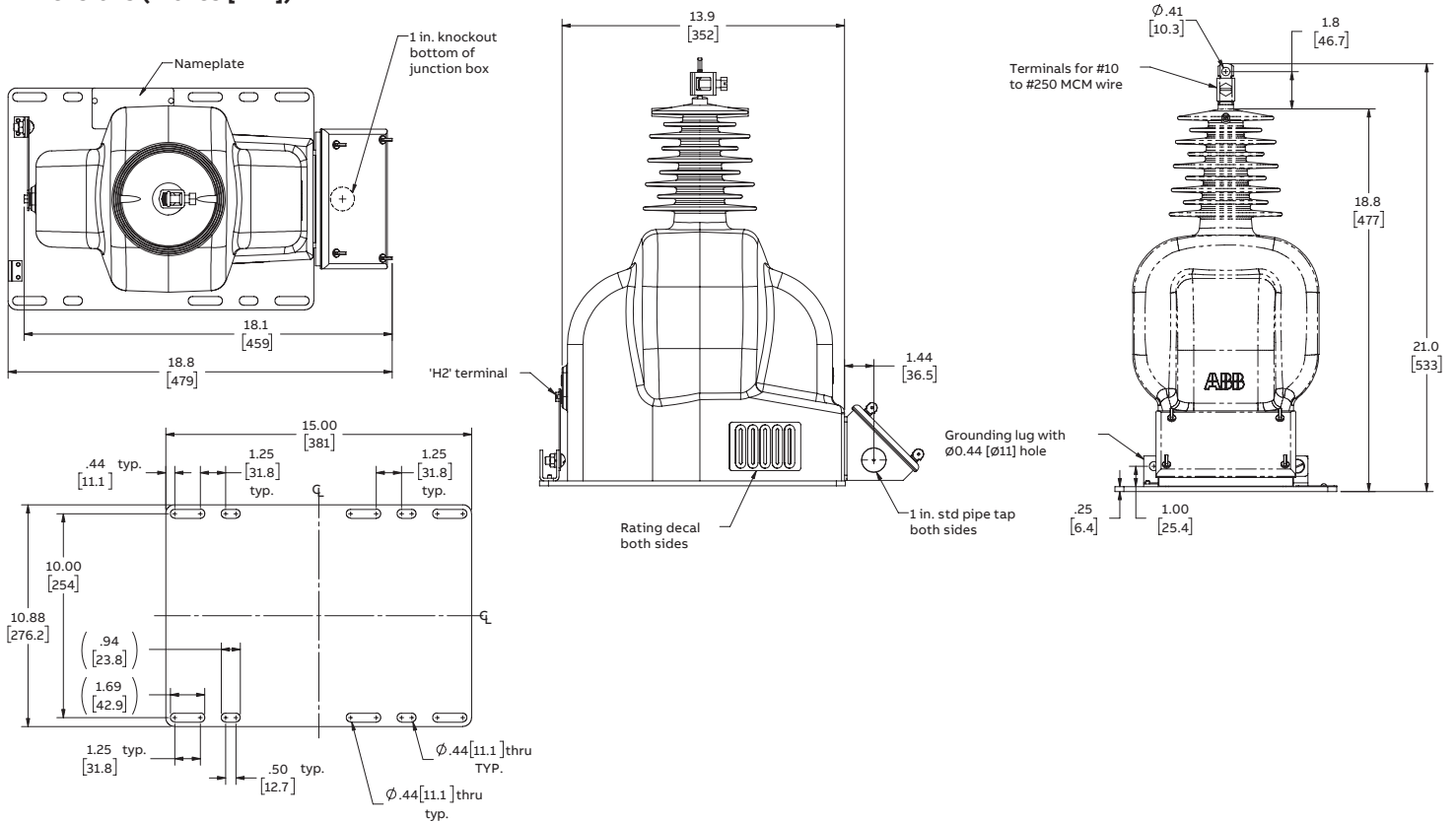
VRO-150G units are provided with a 3-year warranty.

Selection guide

Primary voltage	Secondary voltage	Winding ratio	Metering accuracy	Thermal rating at 30 °C	Rated voltage factor (RVF)	Style number
14400/24940GY	120	120:1	0.3Y	2000	1.9	E-923A720G01
13800/23900GY	120	115:1	0.3Y	2000	1.9	E-923A720G02
13200/22860GY	120	110:1	0.3Y	2000	1.9	E-923A720G03
12000/20780GY	120	100:1	0.3Y	2000	1.9	E-923A720G04
8400/14560GY	120	70:1	0.3Y	2000	1.9	E-923A720G05
7620/13200GY	120	63.5:1	0.3Y	2000	1.9	E-923A720G06
7200/12470GY	120	60:1	0.3Y	2000	1.9	E-923A720G07

Additional styles available upon request. Contact your ABB sales representative or call +1-252-827-3212 for more information

Dimensions (inches [mm])



Unit dimensions (in. [mm])

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