

Turns Ratio Calibration Standard

turns ratio tester calibration device



Vanguard Instruments Company, Inc.
www.vanguard-instruments.com



Turns Ratio Calibration Standard

Turns Ratio Tester Calibration Device

ordering information

Part No.	Description
9130-UC	Turns Ratio Calibration Standard

outstanding features

- Calibration of all Electronic Turns Ratio Tester
- Up to 250 Vac excitation voltage
- Up to 33,000:1 turns ratio

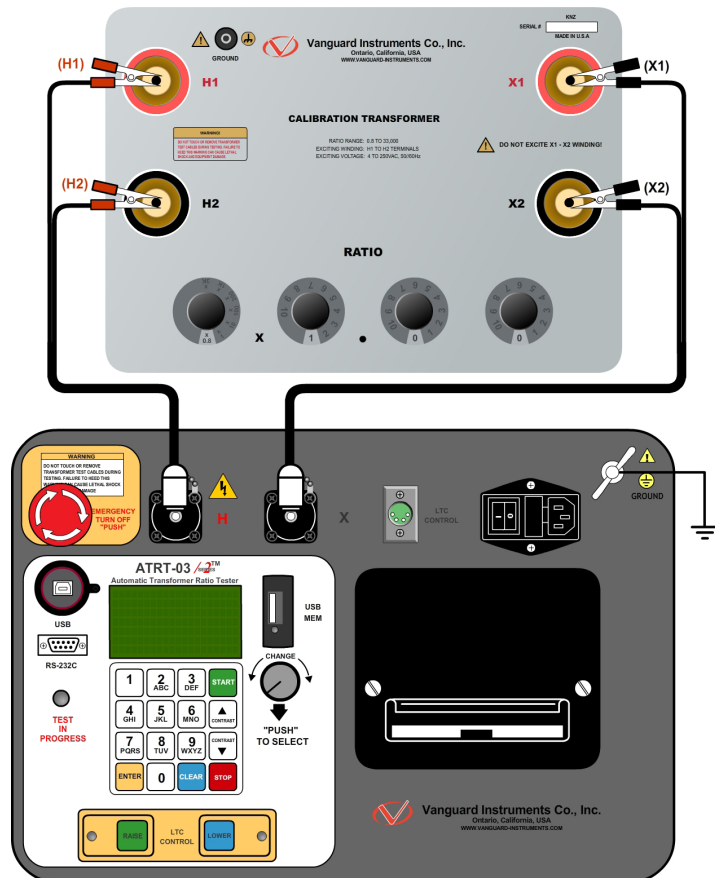
The Vanguard Turns Ratio Calibration Standard is designed to calibrate all Vanguard Turns Ratio Testers. It offers selectable turns ratios from 0.8 to 33,000 to 1 with accuracy of $\pm 0.05\%$ of the set value guaranteed for turns ratios from 0.8 to 5,000.

The Vanguard Turns Ratio Calibration Standard features three decade rotary switches (unit, 10^{th} , and 100^{th}) for selecting the turns ratio. A multiplier switch provides 1, 10, 100, 200, 1000, and 3000 multiplier values.

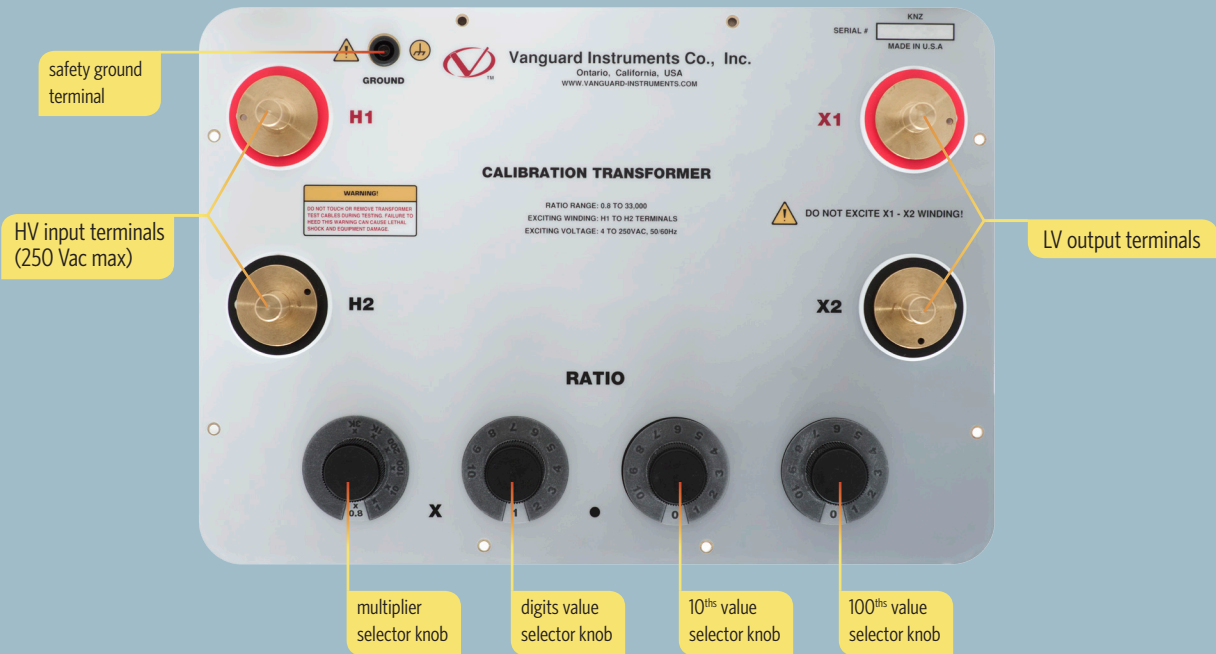
The unit uses a nickel-iron super-alloy core toroidal transformer to ensure a very low excitation in order to achieve high turns ratio accuracy. Up to 250Vac test voltage can be used with the Vanguard Turns Ratio Calibration Standard. The high excitation test voltage allows the unit to be used with virtually all turns ratio testers on the market.

A turns ratio calibration certificate is provided with each Turns Ratio Calibration Standard.










Calibration Transformer Connections



Turns Ratio Calibration Standard Features



Turns Ratio Calibration Standard *technical specifications*

 physical specifications	Dimensions: 16"W x 7"H x 13.5" D (40.6 cm x 17.8 cm x 34.3 cm) Weight: 22 lbs. (9.98 Kg)	 max excitation voltage 250 Vac, 50/60 Hz
 turns-ratio resolution	0.01 step for turns ratios from 0.8 to 11 0.1 step for turns ratios from 11 to 111 1.0 for turns ratios from 111 to 1110	 turns-ratio range 0.8 to 33,000
 turns-ratio accuracy	0.8 to 5,000: $\pm 0.05\%$ of setting 5,001 to 10,000: $\pm 0.1\%$ of setting 10,001 to 20,000: $\pm 0.20\%$ of setting 20,001 to 33,000: $\pm 0.35\%$ of setting	 humidity 90% RH @ 40°C (104°F) non-condensing
 temperature	Operating: -10°C to +50°C (+15°F to +122°F) Storage: -30°C to +70°C (-22°F to +158°F)	 altitude 2,000 m (6,562 ft) to full safety specifications
 warranty	one year on parts and labor	

NOTE: the above specifications are valid at nominal voltage and ambient temperature of +25°C (+77°F). Specifications are subject to change without notice.



Instruments designed and developed by the hearts and minds of utility electricians around the world.

Vanguard Instruments Company (VIC), was founded in 1991. Currently, our 28,000 square-foot facility houses Administration, Design & Engineering, and Manufacturing operations. From its inception, VIC's vision was, and is to develop and manufacture innovative test equipment for use in testing substation EHV circuit breakers and other electrical apparatus.

The first VIC product was a computerized circuit breaker analyzer, which was a resounding success. It became the forerunner of an entire series of circuit breaker test equipment. Since its beginning, VIC's product line has expanded to include microcomputer-based, precision micro-ohmmeters, single and three phase transformer winding turns-ratio testers, transformer winding-resistance meters, mega-ohm resistance meters, and a variety of other electrical utility maintenance support products.

VIC's performance-oriented products are well suited for the utility industry. They are rugged, reliable, accurate, user friendly, and most are computer controlled. Computer control, with innovative programming, provides many automated testing functions. VIC's instruments eliminate tedious and time-consuming operations, while providing fast, complex, test-result calculations. Errors are reduced and the need to memorize long sequences of procedural steps is eliminated. Every VIC instrument is competitively priced and is covered by a liberal warranty.



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