METRAVI

TRANSFORMER TURN RATIO METER

TTRS-100

FEATURES

- Wide measuring range
- Better resolution
- Measures percentage ratio & phase error directly
- · Advanced design using integrated circuits
- Efficient shielding technique
- Compact in size
- Phase sensitive null detector
- · Checks polarity.

"METRAVI" transformer turns ratio meter is perfectively suitable to measure actual turns ratio of a transformer. The instrument also measures percentage ratio & Phase errors directly. The polarity of the transformer under test is also indicated on null detector panel meter, provided on front panel.

TECHNICAL SPECIFICATION

Measuring Range: Transformer ratio measurements are carried out in 10 ranges

Arranged in a 1, 2, 5,10 sequence. For TTRS-100 the measuring span has a range of ratios from 0.800 to 2021. The ratio resolution is 0.01%. In this model phase deviation measurements are carried out in two ranges.

Namely ±5.5 cent-radians (1CR=34minutes).

Accuracy : $\pm 0.1\%$ of reading.

Course balancing : By selector switches provided on panel.

Fine Balancing : By vernier potentiometer provided on panel.

Excitation: The measured value of transformer ratios varies slightly with the

magnitude of excitation voltage applied to the transformer under test. This meter provides 1.2V, 12V & 120 volts excitation voltage. This voltage is isolated from the mains supply for operator's safety. It is preferable to take readings on 120volts whenever possible.

Direct ratio

errormeasurement range $\pm 0.1\%$ of the range with a resolution of 0.02%

Direct ratio error

measurement Accuracy : $\pm 0.25\%$ of the reading.

Null Detector : The solid state, synchronous and phase sensitive null detector with

Adjustable gain control provides high sensitivity for both ratio and

phase balance.

Protection : Over load / Short circuit & H.T. /L.T. reversal.

Polarity check : Provided.

Power supply Input : 230 volts ± 10% single phase, 50Hz. A.C.

Construction : The ratio meter is housed in a sturdy metal case and is built with

the operator's safety and convenience in view. All functionally similar controls are grouped together for ease of operation. Connections between the transformer under test and the instrument are made at clearly identified binding posts. All ratio dials and ratio multiplier selector switch and dial are similarly grouped. Null detector sensitivity

control is adjacent to the null detector.

The zero center null indicators are coordinated with the ratio and phase dials such that the rotation of dials in a direction opposite to the deflection of the null indicator brings closer to balance.

*Technical Specifications & Appearance are subject to change without prior notice



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