

PWR1-3B Ratiometer

3 - PHASE

for Power- and Distribution- Transformers

Transformer measuring
devices

Turns ratio meter

Features

- Ratio range from 0.8 to 2,500
- Full automated measurement
- Measuring voltage 10 V / 100 V selectable
- Display shows ratio, phase-angle, excitation voltage and magnetizing current
- Easy to read large LC display for all three-phases with backlight
- Built-in printer (optional)
- Robust mobile case for field use



The RATIOMETER PWR1-3B is constructed to measure the transformation ratio, phase error and magnetizing current of power- and distribution- transformers for all three-phases simultaneously. Voltage and current transformers are single phase, power transformers normally three-phase. Due to the bad quality on industrial lines (phase jitter and shifting, voltage differences between the three phases) all measurements normally are done single phase, even on three phase ratiometers. **The design of the PWR1-3B contains an internal sinus power oscillator which delivers the necessary exciting voltage with very low distortion and stable voltage not found in industrial lines. This allows very stable and precise single- and three-phase measurements.**

The Ratiometer PWR1-3B uses a large LCD display with backlight to present the values of ratio and phase difference of "H.V. Winding" to "L.V. Winding", and the excitation voltage and the magnetizing current of the high voltage winding.

The instrument performs self calibration and different warning messages before each measurement in case of reversed connections and other failures.

The instrument is battery-powered but can be driven by normal line voltage, too. A built-in printer is optional.

Two test voltages can be preselected. A tap changer connection allows the forward changing of the tap changer automatically.

The ratio range is selected automatically, too.

Specification

Ratio range	1: 0.8 to 1: 2,500 (..to 1:4,000 Option AC)
Accuracy	0.2% of reading +/- 3d (0.08% of rdg. +/- 2d Opt.AC)
Resolution	0.9 to 9.999:1 >> 0.001 / 10.1 to 99.99:1 >> 0.01 100:1 to 999.9:1 >> 0.1 / 1,000:1 to 4,000:1 >> 1
Phase angle	+/- 180.0° +/- 0.2°
Test voltage... ... and current	10/100 VAC (Other volages on request) 120 mA max. @ 100 V
Test frequency	50 Hz / 60 Hz (other frequencies as option)
Input protection	Surge absorbers and fuses
Error andwarning messages	Continuity error (HV and LV) / Shorted windings Tap misconnections / Current error External voltage / HV-LV Reversal / Battery low
Display	Large LCD with back light, 7 lines of information
Interface	USB
Printer	20 Character printout, 7 lines of information (Option)
Power supply	Mains 48...62 Hz, 90...260 VAC 25 VA ; Rechargeable battery for 6h operating
Dimensions	ABS rugged case, W410 x D330 x H180mm.
Weight	approx. 8.5 kg net
Environment	0...60°C not condensing

Questions?

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Here you will get technical assistance as well as complete information regarding features, prices, shipment and reselling.

www.ohmmeter.de

