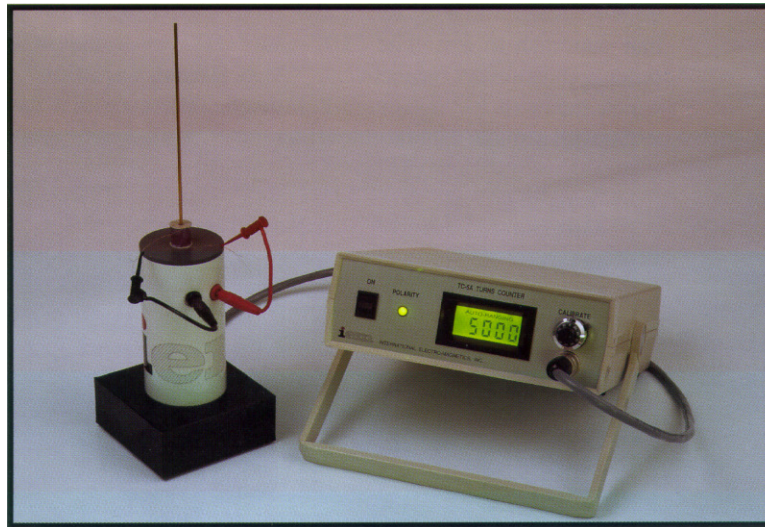


TC-5 / TC-5A Turns Counter



FEATURES

- Fast and easy to use
- .5% Basic Accuracy
- .05% Repeatability
- Plug-in Test Probes
- Polarity Indication
- Counts Turns to 64,000

The TC-5 is designed to verify the turns count of bobbin or free wound coils. Calibrated with a 'Production Standard' coil, it can measure to an accuracy of 99.95% or 1 turn in 2,000 for windings of 10,000 turns or less.

When using a standard Calibration Series probe, all coils within the size range stated for the particular probe will be measured with an accuracy of 99.5%. There is no need to recalibrate the counter to measure different coil designs.

The standard TC-5 is fitted with a 4 1/2 digit display. A Hi / Lo range switch changes the measurement range from 1,999.9 to 19,999. A polarity indicator LED changes from red to green, depending on the relative polarity of the coil being measured.

The TC-5A uses a micro-processor controlled panel meter to provide several refinements. Measurement averaging results in a more stable readout. The TC-5A auto-ranges through three ranges to 64,000 turns. Measurements above 10,000

may be affected by Q and inter-winding capacitance factors. The TC-5A reduces long term temperature drift from 1% to .1% per 10 degrees F. A data acquisition module can also be fitted to the TC-5A.

Both versions of the TC-5 offer fast and accurate measurement of coil windings. Test probes to measure a wide range of coil sizes are readily interchanged. Our probe technology helps to make the TC-5 both an economic and reliable test instrument.

SPECIFICATIONS

Dimensions: 2 3/4" H x 8 1/4" W x 9" Deep,
Metric 70mm H x 210mm W x 250mm Deep.
Power: 3 Watts, 110 or 220 V AC available
Test Frequency: 244 Hz
Test Voltage: 8 mV per turn maximum
Please refer to test probe specifications for additional data.



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TC-5 / TC-5A CALIBRATION SERIES PROBES

IEM Calibration Series probes are specified to measure the turns count of single and multiple winding coils with an accuracy of 99.5%. Select the proper probe from the list below for the range of coil sizes that you wish to test. "ID" and "OD" abbreviations refer to the inner and outer coil diameters. "Max Height Variation" refers to the coil height difference between coil types that can be measured within 0.5% with a single calibration setting.

PROBE DIAMETER AND HEIGHT	RANGE OF COIL SIZES Minimum ID / Maximum OD / Height Variation	PART NUMBER
.036" x 8" (.9 mm x 200 mm)	.04" (1 mm) ID / 2" (50 mm) OD Max Height: 1 1/2" (40 mm)	13-0864-1S
1/16" x 8" (1.6 mm x 200 mm)	.065" (1.5 mm) ID / 2" (50 mm) OD Max Height: 1 1/2" (40 mm)	13-0864-1
7/64" x 12" (2.8 mm x 300 mm)	1/8" ID (3 mm) ID / 2 1/2" (65 mm) OD Max Height: 1 3/4" (45 mm)	13-0864-6
7/32 X 24" (5.5 mm x 610 mm)	1/4" (6 mm) ID / 4" (100 mm) OD Max Height: 2 1/2" (60 mm) (Removable Brass Sleeve allows 3/16" (4.5 mm) ID)	13-0864-7
3/4 X 30" (20 mm x 750 mm)	1 1/2" (38 mm) ID / 7" (175 mm) OD Max Height: (5") 125 mm	13-0864-8
1 1/4 X 34" (40 mm x .9M)	2 1/2" (64 mm) ID / 8" (200 mm) OD Max Height: (7") 175 mm	13-0864-9

To maximize the accuracy of the TC-5A, it is important that the probe matches the size of the coils to be tested. In general the longer the probe is, the larger the diameter of the coils that can be accurately measured. Once the TC-5A has been calibrated with a "Standard Coil" of the "Calibration Coil" size, it will hold its calibration over the specified size range of the probe being used.



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