# Megger

# **Three-Phase TTR® Calibration Standard**



- Used for calibrating the Megger three-phase TTR series
- Useful for troubleshooting and repair
- Field check box (C/N 550555) also available to verify but not calibrate

## DESCRIPTION

The calibration standard, catalog number 550055, is designed for calibrating the Megger three-phase TTR (Transformer Turns Ratio) test set, TTR3XX series, singlephase TTR (TTR100), the TTR20, and TTR25. The standard is also useful for troubleshooting and repair of the instrument as well as a reference transformer for checking accuracy in the field. The calibration standard is available with a calibration certificate of turns ratio accuracy traceable to NIST. NIST is unable to furnish traceability on ratios above 1000.

The standard is essentially a multi-winding toroidal autotransformer whose turns are controlled by three decade switches and a four-step multiplier switch. The transformer provides a ratio range of 0.8 to 2220.

The standard operates on the principle that the voltage ratio of a transformer at no load is almost exactly equal to the true turns ratio. The major source of error is the primary impedance drop due to the magnetizing current. High precision ratios are achieved by using a toroidal core of high permeability, by making the resistance of the exciting winding low, and by use of essentially null-balance comparison techniques.

## **SPECIFICATIONS**

Turns ratio range:	0.8 to 2220		
Turns ratio resolution:	0.01 up to ratios of 11.1 0.1 for ratios between 10 and 111.0 1 for ratios between 100 and 1110 2 for ratios between 200 and 2220		
Turns ratio accuracy:	±0.05 percent of setting		
Exciting voltage:	40 to 120 V, 50/60 Hz		
Exciting winding:	H1-H2 terminals		
Terminals provided:	H1 and H2: exciting winding X1 and X2: secondary winding Ground		
Environmental			
<b>Operating temperature range:</b> -4 to 122°F (-20 to 50°C)			
$50 \pm 1000 \text{ f}(50 \pm 0.000)$			

Storage temperature range: -58 to 140°F (-50 to 60°C) **Relative humidity:** 0 to 90% noncondensing (operating) 0 to 95% noncondensing (storage)

### **Physical Data**

Dimensions: 13.5 x 10.25 x 8 in. (34.5 x 26 x 20.5 cm) Weight: 16 lb (7.5 kg) Case: Impact-resistant, polycarbonate with removable lid and carrying handle

### **ORDERING INFORMATION**

Item (Qty)	Cat. No.
Three-Phase TTR Calibration Standard	550055

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#### **ISO STATEMENT**

Registered to ISO 9001:2008 Cert, No. 110006.01

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