



A TESCO COMPANY

# PRECISION MULTIRANGE CURRENT TRANSFORMER

P-2000-2

## APPLICATION

The Type P-2000-2 Knopp Precision Current Transformer is useful for high and low voltage work in the laboratory, shop and field for testing, measuring, and calibrating. The excellent accuracy and the One-to-One calibrating feature make it admirably suited as a standard for calibrating work. The range of a 5-ampere watt-hour meter standard or a 5-ampere ammeter or wattmeter can be accurately extended by this transformer to cover all current values between 75 amperes and 2000 amperes, and with the advantage that the secondary instrument need not be used below the three-quarter load or scale point.

Because this through-type current transformer provides ranges above 100 amperes, it is a useful transformer as a complement to the self-contained Type RA, RB, and RC Knopp Precision Transformers which are limited to a maximum of 200, 100, and 400 amperes, respectively.

## PRIMARY RANGES

A total of 17 through-type primary ranges are provided as follows: 100 and 120 (10 primary turns), 125 and 150 (8 turns), 200 (5 turns), 250 and 300 (4 turns), 400 (3 turns), 500, 600, 750, and 800 (2 turns), and 1,000, 1,200, 1,500, 1,600 and 2,000 (1 turn). The secondary is 5 amperes.



## ACCURACY

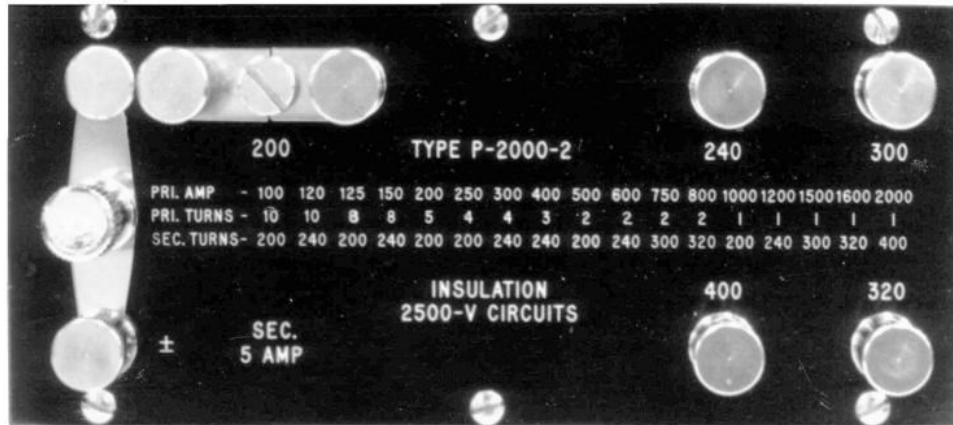
A noteworthy feature of the Knopp Precision Multirange Transformers is the excellent ratio and phase-angle performance, both interrange and overall. The P-2000-2 is furnished, compensated for a specified secondary burden, which can be any value between 0 and 20 volt-amperes. When used with the burden for which compensate, the accuracy on all ranges is well within .02 of 1% for ratio and well within 1 minute for phase angle from 20% to 150% of full-load current. At 10% of full-load current, the ratio is well within -.05 of 1% and the phase angle is well within 3 minutes leading.

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## CALIBRATION

The transformer can be calibrated in itself by the Knopp One-to-One method, by direct comparison of the primary current against the secondary current of the 200-turn secondary. For this test the winding from the 200-turn point to the 400 turn point is used as the primary. This One-to-One test can be accomplished very accurately with a standard laboratory indicating wattmeter. When the highest precision is desired, a Knopp Transformer Comparator should be used. Further information on the Comparator as well as on the Knopp One-to-One method will be gladly sent upon request.

## INSULATION

The transformer housing insulates the inserted primary turns from the transformer secondary winding for 2,500-volt circuits.

## SPECIFICATIONS

The P-2000-2 is of the ring-core, toroidally-wound type. Net weight is approximately 25 pounds. The black phenolic case measures 8-3/4" wide, 4" deep, and 11" high, including binding posts. Window diameter is 3". The secondary is provided with a convenient short-circuiting switch.