



## STANDARDS DIVISION

OTTAWA, August 22, 1952.

TYPE APPROVAL"TESCO" TYPES 1013, 1014, 1015 AND 1016  
TRANSFORMER-LOSS COMPENSATORS

The apparatus specified and illustrated herein has been duly approved by the Standards Division under the provisions of The Electricity Inspection Act, Chapter 22, 1928, as amended, and may be admitted to verification in Canada.

Apparatus Approved: "Tesco" Transformer-Loss Compensators, Types 1013, 1014, 1015 and 1016, manufactured by The Eastern Specialty Company, Philadelphia, Pa., U.S.A., and distributed in Canada by D. M. Fraser Limited, Toronto, Ontario.


Rating of Apparatus: Amperes ..... 5                      Frequency ..... 60 cycles  
Volts ..... 120/240                      Elements ..... 2 or 3

- #1013 - 2-element compensator for watt-hour compensation;  
Range: 5% copper loss on 120-volt meters, 2% on 240-volt.
- #1014 - 3-element compensator for watt-hour compensation;  
Range: same as for #1013.
- #1015 - 2-element compensator for watt-hour or var-hour compensation;  
Similar to #1013 with additional resistors for increased range.
- #1016 - 3-element compensator for watt-hour or var-hour compensation;  
Similar to #1014 with additional resistors for increased range.

Description: Transformer-loss compensators may be used on installations where the contract between purchaser and supplier provides for billing at primary voltages with metering installed on the low-voltage side of the transformer banks. The compensator, when properly adjusted, adds to the meter registration an amount equal to the pre-determined values of iron and copper losses of the transformers, and may also be adjusted to compensate for copper losses of the secondary circuit between the transformer bank and the metering installation and for primary copper losses between the transformers and some agreed point on the primary line. The compensator is connected in the load side of a meter between the meter and test block. A switch on the compensator allows tests to be made on the meter directly; with copper loss compensation only; and with compensation for both copper and iron losses. Tesco transformer-loss compensators are produced in 2- and 3-element types for use with 2-element or 3-element meters on any type of circuit. They may be connected into the 5-ampere secondary circuit of the meter current transformers and are designed to carry 100% overload continuously. They are rated 120/240 volts for direct connection to the low voltage supply or to the secondaries of the meter potential transformers.

Details of construction, adjustment and testing will be issued in a Technical Bulletin.

Conditions: Means shall be provided for effectively sealing the device with a lead seal.

  
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Ref: A-272

"TESCO" 2-ELEMENT TRANSFORMER-LOSS COMPENSATOR

