


 TRADE AND COMMERCE
 CANADA

SD-EA.186

STANDARDS DIVISION

OTTAWA.....April 20, 1955.

TYPE APPROVALEASTERN POWER DEVICES "BEEHIVE" 34.5 KV CURRENT TRANSFORMER

The apparatus specified and illustrated herein has been duly approved by the Standards Division under the provisions of the Electricity Inspection Act, Chap.94, R.S. 1952, and may be admitted to verification in Canada.

Apparatus Approved: "Beehive" type, 34.5 KV Current Transformer, manufactured by Eastern Power Devices Limited, 29 Wabash Avenue, Toronto 3, Ontario.

Rating of Apparatus:	<u>2400 A T</u>	<u>2000 A T</u>	<u>1600 A T</u>
Primary Current	1200/600	2000/1000	1600/800
	800/400	1000/500	
	600/300	500/250	80/40
	300/150	400/200	
	240/120	200/100	40/20
	150/75	100/50	
	120/60	50/25	
	60/30	20/10	
Secondary Current	5 amperes	10/5	
Voltage Rating	34.5 KV		
*Accuracy Rating	0.3B0.1, 0.3B0.5, 0.6B2.0		
Frequency	25-60 cycles		
Style	Outdoor		

* Marked on nameplate.

Description: The name "Beehive" is derived from the beehive-like porcelain cover which houses the windings. The top of the porcelain cover is a metal dome which further enhances the beehive similarity. Just below the dome are four holes through the porcelain, through which the primary terminals enter to connect to the primary coil. The secondary terminals are enclosed in the rectangular metal box at the base of the transformer. The primary and secondary windings are each in the form of a ring and they are interlinked in a chain-like manner. This places the two magnetic fields at right angles to each other, thereby eliminating heavy mechanical stresses between the two windings in the event of a short circuit. The iron core is wound from high grade transformer steel strip. The secondary winding which is wound upon the iron core is encased in a split moulded copper shield. This copper shield imposes an earthed metal screen between the primary and secondary windings. The primary coil is in two halves with the four ends clamped to four primary terminals which are arranged symmetrically around the bushing. The split primary allows either series or parallel connections to give two ratios for the transformer. The transformers are constructed with 1600, 2000 or 2400 ampere turns depending on the ratio as indicated above.

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Ref: A-416

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