



Department of consumer and corporate affairs / Ministère de la consommation et des corporations



STANDARDS BRANCH - DIRECTION DES NORMES

## NOTICE OF APPROVAL

T - 76

OTTAWA March 22, 1972

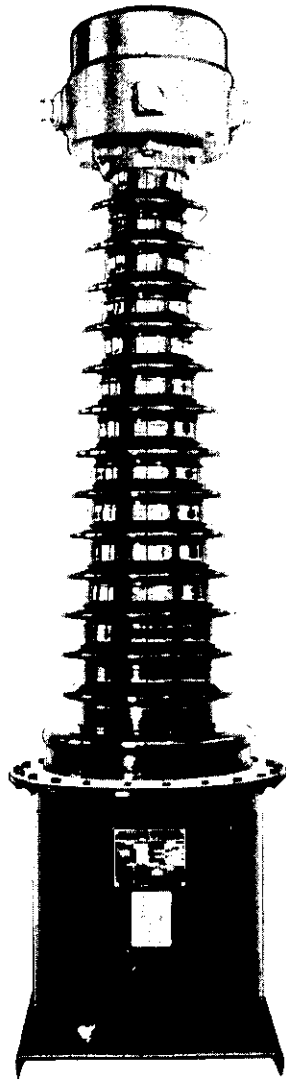
### FERRANTI-PACKARD TYPES "K115" and "K138" CURRENT TRANSFORMERS


Primary Currents	5/10, 10/20, 15/30, 20/40, 25/50, 40/80, 50/100, 75/150, 100/200, 150/300, 200/400, 300/600, 400/800, 500/1000, 600/1200 amperes
Secondary Current	5 amperes
Accuracy Rating at 60Hz	0.3B0.1, B0.2, B0.5, B0.9*, B1.0, B1.8, B2.0
R.F. (rating factor)	1.5
Frequency	60 Hz
Nominal Voltage Class	
K115	115kv
K138	138kv
BIL (Basic Impulse Insulation Level)	
K115	550kv
K138	650kv
Number of Secondaries	1 or 2 <sup>①</sup>
Style	Post type, oil insulated, outdoor

\* The nameplates are marked either 0.3B0.5 or 0.3B0.9 and this applies to both ratios, and to both secondaries if there are 2.

① Both of the above types of current transformers are available with double secondaries. Each secondary would be complete with its own winding and magnetic circuit and would therefore be completely independent of the other and its accuracy would be maintained regardless of the load on the other. Because of this, any unused secondary must be short-circuited.

The nameplates of units having this arrangement would be marked e.g. 200/400-5-5.



**FERRANTI  PACKARD LIMITED**

ST. CATHARINES, ONTARIO  
CURRENT TRANSFORMER

HERMETICALLY SEALED PERIODIC INSPECTION ONLY OF OIL IS REQUIRED.

TYPE  O.I.S.C. 55°C. RISE AMBIENT 30°C. CYCLES

RATED CURRENT  NOMINAL RATIO

ACC. RATING  RATING FACTOR  55°C. RISE

ASA. THERMAL AMPS 10 SEC. RATING ASA. MECHANICAL RATING - AMPS

ON  CONN.  OR  CONN.  PEAK

ASA. INSUL. CLASS  KV. ON  CONN.

ONE MIN. TEST  KV. OR  PEAK

RW. IMP. LEVEL  KV. SERIAL NO.

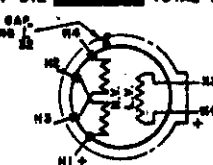
GALS. OIL  TOTAL WT.  LBS. DATA SHT.

INSULATION R.F.  %

RATIO	CONNECT	USE TERMINALS
H <sub>1</sub> - H <sub>2</sub>	←	H <sub>1</sub> - H <sub>4</sub>
H <sub>1</sub> - H <sub>2</sub> : H <sub>2</sub> - H <sub>3</sub>	+	H <sub>1</sub> - H <sub>4</sub>

POLARITY SUBTRACTIVE

SPARK GAP SETTING



E-41848-1

DESCRIPTION

The types K115 and K138 current transformers are designed for use in outdoor substations in billing metering and relaying applications.

The core is constructed from grain-oriented steel and the windings are insulated with oil-impregnated Kraft paper.

The core and coil assembly is dried under vacuum and installed in a cylindrical heavy gauge oil-filled tank mounted on a rectangular base.

The primary leads extend upward into a porcelain bushing which is attached to the tank by means of a flexible clamping arrangement.

An alodined aluminum dome is bolted to the top of the porcelain insulator and this accommodates the primary terminals and provides a chamber for oil expansion.

Each primary terminal consists of a flat pad and two or four  $\frac{1}{2}$ " diameter brass studs.

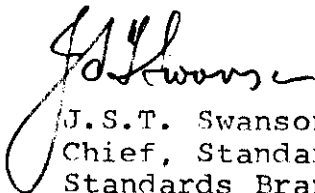
The secondary leads are crimped to studs sealed in a 'glastic' plate, they are provided with solderless connectors and are mounted inside a terminal box near the bottom of the tank.

The primary terminals are identified as "H1", "H2", "H3" and "H4" and a schematic diagram on the nameplate indicates the connections required to connect the two sections of the primary winding in series or in parallel to obtain the desired ratio.

The secondary terminals are marked "X1" and "X2", with "X1" having the same polarity as the primary terminal "H1". Terminals "Y1" and "Y2" are additional for units with double secondaries.

Approval granted to:

Ferranti-Packard Limited,  
St. Catharines, Ontario.



J.S.T. Swanson, P. Eng.,  
Chief, Standards Laboratory,  
Standards Branch.



W.J.S. Fraser,  
Chief, Electricity & Gas Division,  
Standards Branch.

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