



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



STANDARDS BRANCH - DIRECTION DES NORMES

**NOTICE OF APPROVAL
AVIS D'APPROBATION**

T-91

OTTAWA December 4, 1973

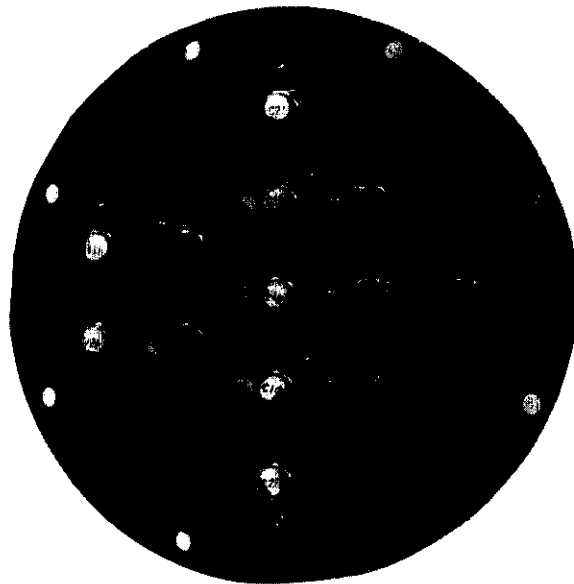
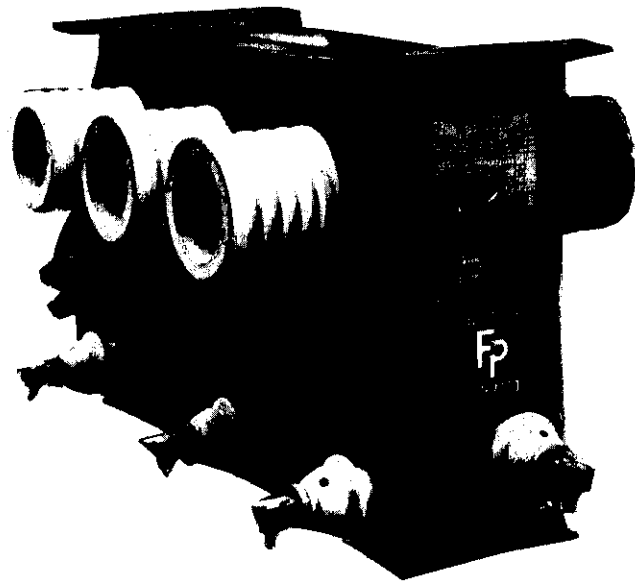
FERRANTI-PACKARD TYPE "VRM5" METERING OUTFITS

Primary Currents	
Single Ratio	1000, 1200, 1500, 2000, 2500, 3000, 3200, 4000 and 5000 amperes
Double Ratio	1000/500, 1200/600, 1500/750, 2000/1000, 2500/1250, 3000/1500, 3200/1600, 4000/2000 and 5000/2500 amperes
Secondary Current	5 amperes
Primary Voltages	4200, 4800, 4160 Grd Y/2400 volts
Secondary Voltage	120 volts
Accuracy Rating at 60 Hz	
Current Transformers	
500 and 600 amperes	0.3B0.1*, B0.2, B0.5*, B0.9*, B1.0; 0.6B1.8*, B2.0
All others	0.3B0.1*, B0.2, B0.5*, B0.9*, B1.0, B1.8*, B2.0
Voltage Transformers	0.3WXY*; 0.6Z
Frequency	60 Hz
Nominal Voltage Class	5 kv
Style	Oil filled tank, outdoor

* Marked on the nameplates.

These metering outfits use type "RU5" current transformers (T-19) and type "VE5" voltage transformers (T-13-2) installed in a free breathing, non-magnetic stainless steel tank. The voltage transformers are encapsulated in a weatherproof epoxy resin and the current transformers are finished to resist condensation.

The upper illustration on page 2 shows a type VRM5 metering outfit containing 3 current transformers and 3 voltage transformers for use on a 3-phase 4-wire wye circuit.



A metering outfit containing 3 current transformers and 2 voltage transformers, also for use on a 3-phase 4-wire wye circuit, would be identical in appearance except that on the polarity side there would be 2 only voltage transformer bushings, 1 located under the "A" phase and the other under the "C" phase. The neutral bushing would be on the right hand side of the tank as shown.

The 3-phase 3-wire metering outfit would have 2 only porcelain tubes for the current transformers in "A" and "C" phases. It would have 3 voltage transformer bushings as shown in the illustration, but would not have a neutral bushing at the right hand side of the tank.

Connections from the voltage transformer bushings to the primary bus are made by the customer.

Current Transformer primary polarity is indicated by the white porcelain tubes, and the voltage transformer polarity is indicated by the location of the voltage transformer bushings and by reference to the schematic diagram on the nameplate.

Leads from the secondary windings of all current and voltage transformers are brought to terminals inside a terminal box located at one end of the transformer tank where they are identified in accordance with the schematic wiring diagram.

The lower illustration on page 2 shows the arrangement of the secondary terminals and the means provided to short-circuit the secondary windings of the current transformers.

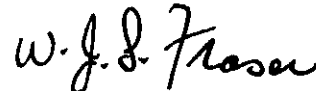
The illustrations on page 4 are of the schematic wiring diagrams and other data that will be marked on plates attached to these metering outfits.

Approval granted to:

Ferranti-Packard Limited,
St. Catharines, Ontario.



J. L. Armstrong,
Chief, Standards Laboratory,
Metrology & Laboratory Services Branch.



W. J. S. Fraser,
Chief, Electricity and Gas
Division,
Metrology & Laboratory Services
Branch.

REF: GL 1145-57/F2-596
G 1145-57/F2-596

FERRANTI-PACKARD LIMITED
ST. CATHERINES, ONTARIO, CANADA

TEMP. RISE 55°C
TYPE **VT-18** FOR USE ON 3 PHASE 4 WIRE Hz 60
F.W. IMP. LEVEL **60** HV ONE MIN. TEST **10** MV DATA SHEET

METERING OUTPUT INSULATION P.F. **4160Y** VOLTS
TOTAL WT. SERIAL No. **12**

NOTE: VT-18 C.T.'S ARE APPROVED FOR REVENUE METERING BY THE STANDARDS BRANCH DEPT. OF CONSUMER AND CORPORATE AFFAIRS - OTTAWA

CONNECT TO:
LOW C2A B C3A : C2B B C3B : C2C B C3C
HIGH C1A B C3A : C1B B C3B : C1C B C3C

3 CURRENT TRANSFORMERS Hz 60
TYPE **VB 5** RATED VOLTS **2400-10** RATED CURRENT **10.0** NOMINAL RATIO **0.33 0.82** ACCURACY RATING **0.33 0.82** RATING FACTOR **750** VA AT 55°C RISE
MECHANICAL RATING **UNLIMITED** THERMAL-CURRENT RATING **UNLIMITED** C.S.A. THERMAL I.O.M. RATING **UNLIMITED** PEAK AMPS **UNLIMITED** THERMAL I.O.M. RATING **UNLIMITED** PEAK AMPS **UNLIMITED** SERIAL No. **12** MANUFACTURED DATE **1951**

MADE IN CANADA

FERRANTI-PACKARD LIMITED
ST. CATHERINES, ONTARIO, CANADA

TEMP. RISE 55°C
TYPE **VT-18** FOR USE ON 3 PHASE 3 WIRE Hz 60
F.W. IMP. LEVEL **60** HV ONE MIN. TEST **10** MV DATA SHEET

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CONNECT TO:
LOW C2A B C3A : C2C B C3C
HIGH C1A B C3A : C1C B C3C

2 VOLTAGE TRANSFORMERS Hz 60
TYPE **VB 5** RATED VOLTS **2400-10** RATED CURRENT **10.0** NOMINAL RATIO **0.33 0.82** ACCURACY RATING **0.33 0.82** RATING FACTOR **750** VA AT 55°C RISE
MECHANICAL RATING **UNLIMITED** THERMAL-CURRENT RATING **UNLIMITED** C.S.A. THERMAL I.O.M. RATING **UNLIMITED** PEAK AMPS **UNLIMITED** THERMAL I.O.M. RATING **UNLIMITED** PEAK AMPS **UNLIMITED** SERIAL No. **12** MANUFACTURED DATE **1951**

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