CANADA

DEPARTMENT OF TRADE AND COMMERCE

STANDARDS BRANCH

E-3

OTTAWA May 6 1965

NOTICE OF APPROVAL

FOR

FERRANTI TYPE "FMF" 2-ELEMENT POLYPHASE WATTHOUR METER

Apparatus

Rating	
Current Range	0.2 - 10 amperes
Voltage	120 volts
Elements	two pairs
Circuit	3 phase 3 wire
Frequency	60 cycles
Disc constant (Kh)	1.25
Register	4-dial clock-type with test dial.

Description

The type FMF 2-element polyphase watthour meter is designed for use with instrument transformers. It has two discs on a common shaft, each acted on by one of the elements, and each element is made up of two identical electromagnets mounted on opposite sides of their respective discs and having their potential coils connected in parallel and their current coils connected in series, the connections being made to studs at the back of the case. Two diametrically opposed permanent magnets on the upper disc provide the braking torque. A repulsion magnet mounted on the disc shaft removes 70% of the rotor weight from the lower bearing.

A ratchet device for preventing reversal of disc rotation may be fitted to the top of the disc shaft.

If it is desired to use this meter in a summating or telemetering circuit, a transistorized pulse generator is available. This generator comprises a slotted disc, gear driven from the disc shaft, through the slots of which a light falls alternately on two photo transistors, which are connected to a printed circuit card visible at the lower front of the meter, and thus by means of a change of state, or flip-flop, produce output pulses related to disc revolutions. This relationship is marked on the nameplate as kwh/contact. The voltage to operate the impulsing device is supplied by an external power supply.

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FERRANTI TYPE "FM" 2-ELEMENT POLYPHASE WATTHOUR METER

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Description (continued)

The type FMF polyphase watthour meter is only available in switchboard mounting and its use is restricted to temperatures between $0^{\circ}C$ and $50^{\circ}C$.

Approval granted to:- Ferranti-Packard Electric Limited,
St. Catharines, Ontario

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