

# DEPARTMENT OF TRADE AND COMMERCE STANDARDS BRANCH



OTTAWA July 7, 19 65

### NOTICE OF APPROVAL

FOR

#### WESTINGHOUSE TYPE "D2B-2F" 2-ELEMENT POLYPHASE WATTHOUR METER

#### Apparatus

Current Range 0.25-10 amperes Voltage 115 and 120 volts Elements 60 cycles Frequency Watthour Constant, Kh 1.0 Register Ratio 100 Register 4 circle with test dial \*Pulse Initiator Type CD-24 Pulses per disc revolution 2 (flip-flop) Maximum Pulse Rate 80 pulses per minute Maximum photocell rating 200 PIV and 150 ma #Watthours per pulse 0.5 Detent With or without

- \* This meter is approved with and without the CD-24 pulse initiator, but when the CD-24 pulse initiator is used, the pulse rate will be marked on the nameplate in the form "CD-24 Pulse Rate 1 pulse 0.5 wh" or whatever rate applies to the specific requirement.
- # This meter is approved with and without the reverse detent device, but if a detent device is installed, the nameplate will be marked "detent equipped".

#### Description

The type D2B-2F 2-element polyphase watthour meter is designed primarily for use with instrument transformers and is housed in a switch-board mounting case. It has a special disc which is painted black on its underside except for two small reflective areas, diametrically opposite but on different radii. Two miniature lamps shine on the disc and the reflective spots on the disc reflect the light alternately onto two silicon controlled

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Description (Cont'd.)

rectifier photo cells, triggering a flip-flop switching action, and an AC voltage applied to these photocells will produce in the external circuit a reversing rectified DC current.

The type D2B-2F watthour meter has only one balancing adjustment which is on the RH element, and only one light load adjustment which is on the IH element.

The disc is magnetically supported and an auxiliary gear is interposed between the disc shaft worm and the conventional register take-off gear because the meter elements are mounted well back in the case. The edge of the disc with its black timing mark can be seen through a small opening in the magnet housing.

This approval covers this meter with and without potential indicating lights.

Approval granted to: The Canadian Westinghouse Company Limited, Hamilton, Ontario.

W. & Fraser

W. J. S. Fraser, Chief, Standards Laboratory, Standards Branch. K. Cryer,

Chief, Electricity & Gas Division, Standards Branch.

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