



DEPARTMENT OF TRADE AND COMMERCE
STANDARDS BRANCH

E-14

Reissue

OTTAWA July 18, 1966.

NOTICE OF APPROVAL

FOR

WESTINGHOUSE TYPE "D2B-2F" 2-ELEMENT POLYPHASE WATTHOUR METER
and type "CD-21 L" Pulse Initiator
Apparatus

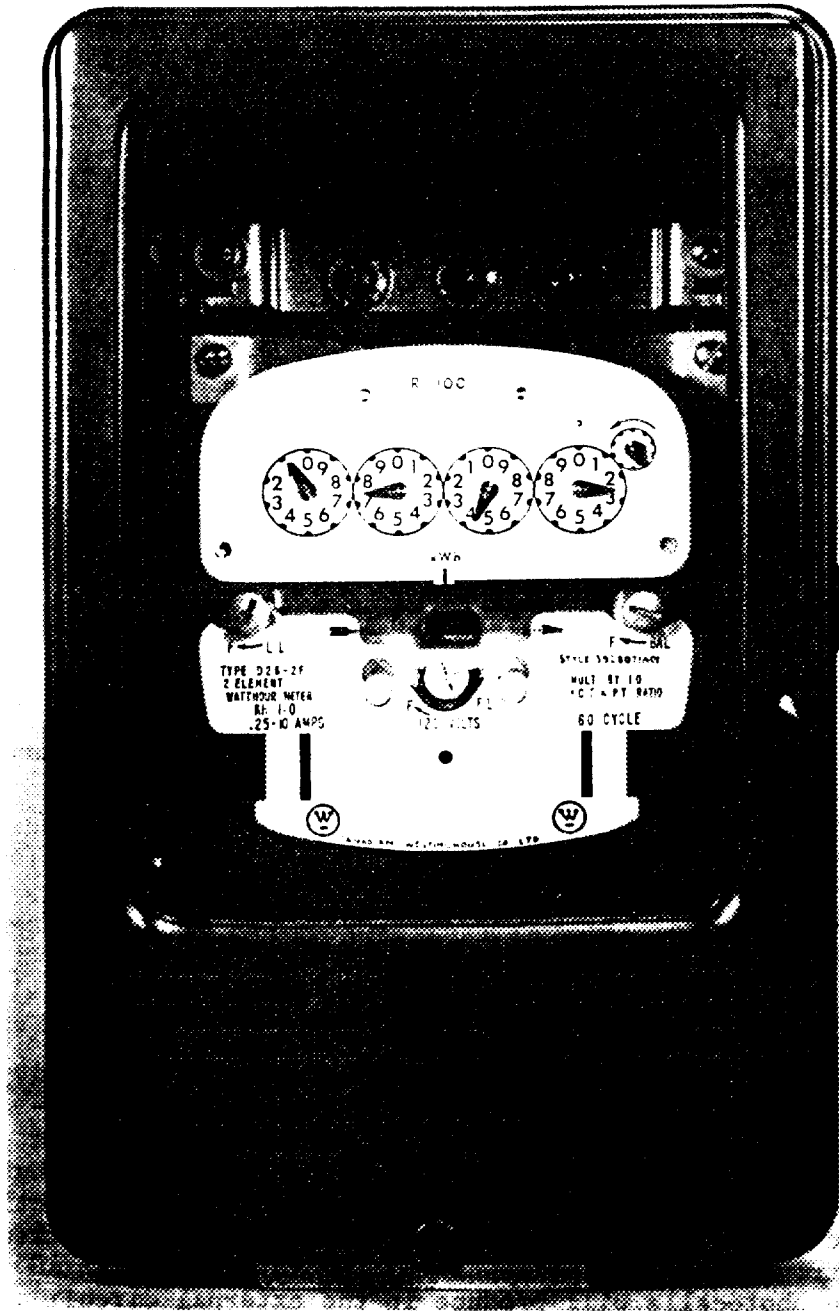
Current Range	0.25-10 amperes
Voltage	115 and 120 volts
Elements	2
Frequency	60 cycles
Watthour Constant, Kh	1.0
Register Ratio	100
Register	4 circle with test dial
* Pulse Initiator Type	CD-24 or CD-21
Fulses per disc revolution	2 (flip-flop)
Maximum Pulse Rate	80 pulses per minute
# Watthours per pulse	0.5
# Detent	With or without

* This meter is approved with and without the CD-24 or CD-21 pulse initiators, but when a pulse initiator is used, the pulse rate will be marked on the nameplate in the form "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".

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 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 meter is designed for use in three-phase systems. It features four dials for energy measurement, each with a scale from 0 to 9. The central dial is used for power factor measurement. The meter is rated for a maximum current of 250 amperes and a maximum voltage of 1000 volts. It is suitable for use in industrial and commercial applications.



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 LH 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.

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Ref: SL-100-882

