

TRADE AND COMMERCE  
CANADA

STANDARDS BRANCH

OTTAWA, May 25, 1960.

TYPE APPROVAL

CANADIAN WESTINGHOUSE TYPES "MA2", "MS2", "MS5",  
"MB2F", "MA8", "MS8", "MB8F" AND "MA5"  
POLYPHASE WATTHOUR METERS

The apparatus specified and illustrated herein has been duly approved by the Standards Branch under the provisions of the Electricity Inspection Act, Chap. 94, R.S. 1952, and may be admitted to verification in Canada.

Apparatus Approved: Types "MA2", "MS2", "MS5", "MB2F" 2-Element, "MA8", "MS8", "MB8F" 2½-Element Y, and "MA5" 2-Element Network Polyphase Watthour Meters, manufactured by Canadian Westinghouse Company Limited, Hamilton, Ontario.

## Rating of Apparatus:

Current Ranges .... 0.12-10 amps., 0.5-50 amps., 1.2-100 amps.  
Voltage ..... 115 and 120, 230 and 240, 460 and 480, 575 and 600  
for "MA2", "MS2", "MS5" and "MB2F";  
120/208 or 240/416 for "MA8", "MS8", "MB8F" and  
2-element "MA5" network.  
Elements ..... 2 for types "MA2", "MS2", "MS5", "MB2F", "MA5" network;  
2½ Y for types "MA8", "MS8" and "MB8F"  
Frequency ..... 60 cycles  
K<sub>h</sub> ..... Basic constant for 2-element, 0.12-10 amp., 120-volt - 2/3  
Basic constant for 2½-element, 0.12-10 amp., 120-volt - 1  
For all other ratings the constant is proportional to the  
maximum amperes and the voltage.

Description: The original type "C" already approved has been modified to become type "M" in the following ways:

- (1) The series uses current range marking rather than nominal rating.
- (2) Four-dial clock register will be standard on all self-contained meters. The sweep hand register will be standard for all switchboard meters but clock type will be supplied when requested by the customer.
- (3) Switchboard transformer-type meters will be marked showing a multiplier of 0.1 instead of 1 x CT x VT ratio when sweep hand registers are used.
- (4) The discs will have a smooth edge.
- (5) Bases, grids, terminal covers, damping magnets and cover rims will be coated with a new corrosion resistant paint, grey in colour.
- (6) The damping magnet assembly is entirely different in construction from that used in previous "C" polyphase meters. The alnico magnet used in

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the modification in conjunction with a suitable temperature-responsive alloy results in improved temperature performance.

- (7) The electromagnet basic structure has been standardized for all types. A considerably higher torque has been achieved. A general improvement in light load performance and high load compensation has been provided. The light load adjuster assembly has been modified to provide a smoother more positive adjustment.

With sweep hand registers having a multiplier of 0.1, the sweep hand is considered to be the first digit.

240-volt meters are not approved for use on 277 volts.

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Ref: A-825

CANADIAN WESTINGHOUSE TYPE "MA5" POLYPHASE WATTHOUR METER



