

TRADE AND COMMERCE
CANADA

SD-EA.84

STANDARDS DIVISION

OTTAWA, August 21, 1952.

TYPE APPROVALPACKARD TYPES "B1A" and "B1S" WATTHOUR METERS

The apparatus specified and illustrated herein has been duly approved by the Standards Division under the provisions of The Electricity Inspection Act, Chapter 22, 1928, as amended, and may be admitted to verification in Canada.

Apparatus Approved: Types "B1A" and "B1S" Single-Phase Watthour Meters, manufactured by the Packard Electric Company Limited, St. Catharines, Ontario.

Rating of Apparatus:

Rated Amperes	10	15	25
Maximum Amperes	40	60	75 *
Wire	2	3	3
Volts	115	230	230
Frequency	60	60	60
Kh	2/3	2	3 1/3

* Approval is granted to supply a proportion of the 25-ampere meters with a maximum rating of 100 amperes, in which case the meters will have a multiplier of 10 on the register.

Description: The new type "B1" Packard meter differs materially from the types A1 and A2. It has Alnico damping magnets, improved calibrating adjustments and has, the manufacturer claims, an improved and more stable element which incorporates Class II temperature compensation. The thickness of the rotor disc has been reduced from .040 inches to .031 inches, thus reducing the load on the lower bearing. The double jewel and ball lower bearing has been retained with modifications. The voltage and current elements dovetail together to form a rigid unit but the two parts may be separated for the purpose of replacement. The voltage flux returns in the silicon steel core and voltage compensation has been added. The principle of the overload compensation is similar to that of the old meter but the mechanical arrangement is different. All adjustments are of the screw type and are accessible from the front of the meter. The full load adjustment is obtained by shifting a magnetic shunt. The P.F. adjustment is made by moving a punched lag plate in or out from under the voltage pole. The light load adjustment is made by moving the same lag plate laterally. The weight of the meter has been reduced by nearly one-third and the size has also been reduced slightly. The basic constant has been altered to 1/3 watthours per rev. The register, designated style "C", is substantially the same in appearance as the style "B" formerly used. However, due to the change in meter speed, the gear ratios are different. Also a number of other changes have been made, including the shape of the gear tooth, so that none of the rotating parts are interchangeable.

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Ref: A-273

PACKARD TYPE "BJA" SINGLE-PHASE WATTHOUR METER

