


 TRADE AND COMMERCE
 CANADA

S-EA.458

STANDARDS BRANCH

OTTAWA June 8, 1960.

TYPE APPROVALSANGAMO TYPE "PWS" THERMAL DEMAND-ENERGY METERS

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

Apparatus Approved: Type "PWS" 2-Element Combination Thermal Demand-Energy Meter, manufactured by Sangamo Company Limited, Leaside, Toronto 17, Ontario.

Rating of Apparatus:

Current Range (amperes)	2.5-150	2.5-200
Voltage Rating (volts)	115 or 120	115 or 120
Disc Constant (watthours/rev.)	1/4.4	1/4.4
Demand Scale (watts)	1500	1500
Kilowatts	30	45
*Multiplier	20	30
Register Ratio	277-7/9	416-2/3
Test Period	32 minutes	32 minutes
Frequency	60 cycles	60 cycles

* Multipliers apply to both watthour and demand readings.

Description: The type "PWS" is a combination meter performing the same functions as the presently approved type "NBDS" (Circular SD-EA.282, January 28, 1957), and its particular application is in situations where space limitations preclude the use of the latter. The watthour section is a single disc, two stator design and is available in socket type base only. The full load adjustment is from the front by turning one or both of two screws shunting the magnet. The light load adjustment is the conventional vane, adjustable by screw driver from the front of the meter. The power factor adjustment is a slide wire directly below its associated current coil. The element adjustment is a magnetic shunt screw in the centre of the pole piece of each potential coil. The zero adjustment for the demand element is through a hole at the centre top of the register face. The full scale demand adjustment is located just above and to the left of the demand dial. The demand element is the conventional opposing bimetal spirals on a single shaft but, owing to the non-linear characteristic of the spiral, the temperature compensating helix formerly used has been eliminated. The

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