CANADA

DEPARTMENT OF TRADE AND COMMERCE

STANDARDS BRANCH

S-EA.610

OTTAWA, February 5, 1964.

TYPE APPROVAL

SANGAMO TYPE "4L3" COMBINATION POLYPHASE 2-ELEMENT
WATTHOUR METER AND 10 MINUTE THERMAL KVA DEMAND METER

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 "4L3" Combination Polyphase 2-Element Watthour Meter and 10 Minute Thermal KVA Demand Meter, manufactured by Sangamo Company Limited, Leaside, Toronto 17, Ontario.

Rating of Apparatus:

Current Range	0.12 - 7.5 amperes
Voltage	115 volts
Frequency	60 cycles
Phase	3
Wire	3
Elements	2
°Response Period	10 Minutes
Disc constant	1/6 each disc
#Register	Differential, clock 4-dial with test dial
Register Ratio	6000 (overall)
*Single Phase Test Constant	3/4
Full Scale (polyphase)	1500 VA

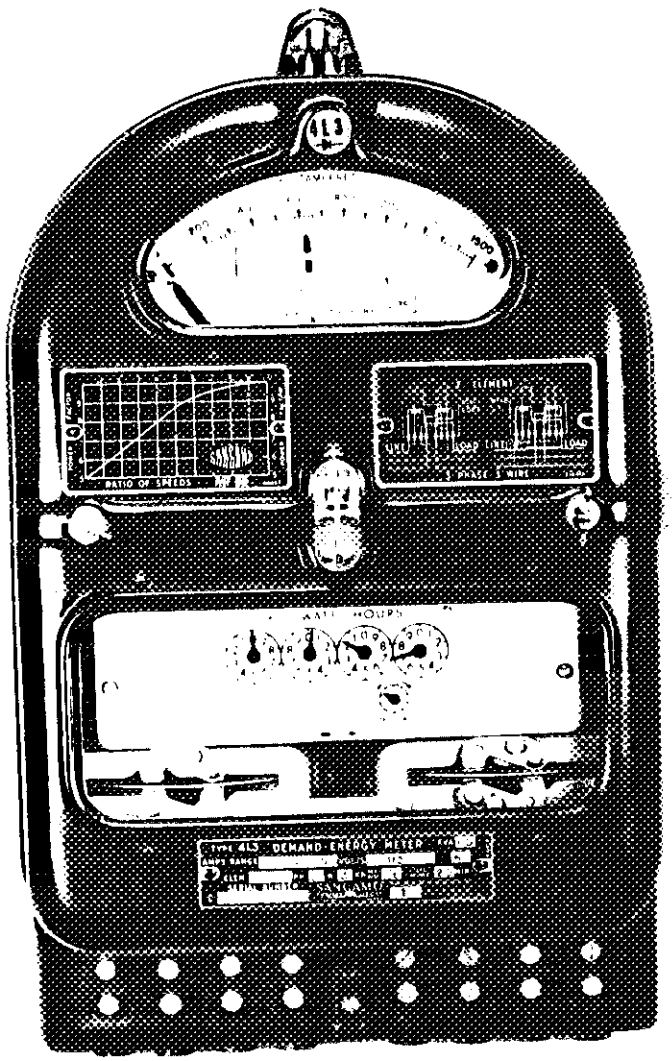
° The Response Period is the time necessary for the indicator to reach 90% of the final indication.

Register approved under Circular S-EA.493, January 23, 1961.

* When testing on single phase, potential must be supplied to both elements and the test load reduced by a factor of 3/4 to obtain the same reading; e.g., the test load for a reading of 1.0 KVA will be .75 KVA or .375 KVA single phase load applied to both elements in series.

...../2

SANGAMO TYPE "413" COMBINATION POLYPHASE 2-ELEMENT
WATTHOUR METER AND 10 MINUTE THERMAL KVA DEMAND METER



A874D

Description: Except for the different response period, this rating is identical to that approved under S-EA.497 of February 17, 1961, which had a marked test period of 32 minutes.

For 3-phase measurement all three currents must be taken into account. A network of rectifiers is arranged to derive the third current from the two that are supplied to the meter, so that the 4L3 will not measure correctly if supplied from the secondaries of three current transformers connected in delta.

The use of a metal plate bearing the serial number and mounted between adjacent tapped holes in the magnet housing, and a new differential register are covered by circular S-EA.493.

W. J. D. Fraser

(for) E. F. Power,
Chief, Electricity & Gas Division,
Standards Branch.

R. W. MacLean,
Director,
Standards Branch.

Ref: A874F