

STANDARDS DIVISION

OTTAWA. October 18, 1956.

TYPE APPROVAL

SANGAMO TYPE "412" 3-PHASE 4-WIRE Y DEMAND-ENERGY METER

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

Apparatus Approved: Type "412" 3-Phase, 4-Wire Y Demand-Energy Meter, manufactured by the Sangamo Company Limited, Leaside, Toronto 17, Ontario.

Rating of Apparatus:

Normal Current Range	0.75 to 50 and	1.50 to 100 amperes
Volts	120/208	120/208
Frequency	60 cycles	60 cycles
Demand Test Time	32 minutes	32 minutes
Number of Elements		$2\frac{1}{2}$
K _b	2.5	5.0
Demand Full Scale		30 KW
Multiplier	10	20
Type of Service	3-phase 4-wire Y	3-phase 4-wire Y

Description: The chief departure from the previous approvals of the "4L2" type of meter is in the demand potential circuit. The KVA element previously used in such meters approved under NRC-17, NRC-24, NRC-106, SD-EA.158, SD-EA.187 and SD-EA.188, was intended for use on voltages 60 degrees apart and, when used on 3-phase 4-wire Y services, required reversal of one voltage. In these new meters the potential circuit is designed for use on voltages at 120 degrees. Both capacities are self-contained. In this respect they are practically identical to the "ED-30" meters approved under NRC-165 for 3-phase 4-wire Y service, even to the extent of the terminal arrangements being the same. The current transformers used in the type "412" meters, however, are a new smaller type. The register may be four- or five-circle differential type or two separate clock type as used on other type "412" meters.

R. W. MacLean, Director,

Standards Division.

E. F. Power

Assistant Director (E&G),

Standards Division.

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