


 TRADE AND COMMERCE  
 CANADA

 SD-EA.310A  
 (cancelling SD-EA.310)

## STANDARDS DIVISION

OTTAWA, September 24, 1957.

MODIFICATION OF TYPE APPROVALSANGAMO TYPE "ED30" DEMAND-ENERGY METER

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

Apparatus Modified: Type "ED30" Polyphase Demand-Energy Meter, manufactured by the Sengamo Company Limited, Leaside, Toronto 17, Ontario.

## Rating of Apparatus:

Ampere ratings and related data are tabulated below. For 2-element, values are for 115- or 120-volt meters; for higher voltages they are increased in direct proportion to the voltage.

2-Element 120, 240, 480, 600 or 115, 230, 460, 575 Volts

Ampere Rating .....	.12-7.5*	.25-15*	.5-37.5	1.2-75	2.5-150
KW Full Scale .....	1.5	3	7.5	15	30
Multiplier .....	1	2	5	10	20
Watthour $K_h$ .....	1/6	1/3	1	1-2/3	3-1/3
Maximum Amperes at rated KW and Volts ...	7.5	15	37.5	75	150

2½-Element Wye 120/208 Volts

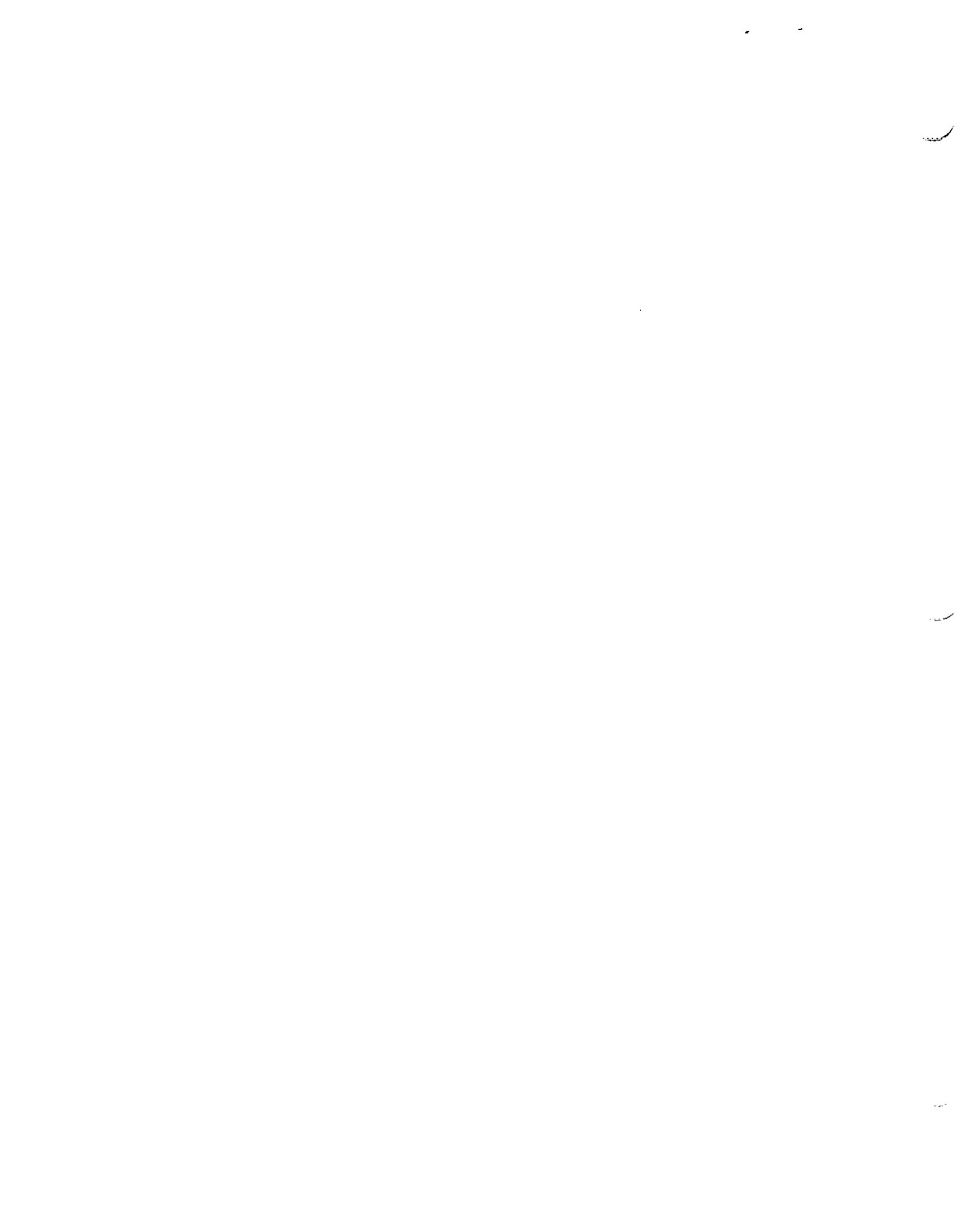
Ampere Rating .....	.12-8.5*	.25-20*	.5-40	1.2-85
KW Full Scale .....	3	7.5	15	30
Multiplier .....	2	5	10	20
Watthour $K_h$ .....	1/2	1	2-1/2	5
Maximum Amperes at rated KW and Volts ...	8.33	20.83	41.67	83.3

2½-Element Delta 115/230 or 120/240 Volts

Ampere Rating .....	.12-7.5*	.5-37.5	1.2-75	1.5-100
KW Full Scale .....	3	15	30	40**
Multiplier .....	2	10	20	40
Watthour $K_h$ .....	1/3	2	3-1/3	6-2/3
Maximum Amperes at rated KW and Volts ...	7.5	37.5	75	100

\* May be transformer-type or self-contained; all others self-contained.  
 \*\* Has 1000-watt scale; others have 1500-watt scale.

...../2



Rating of Apparatus (continued)

Frequency ..... 60 cycles  
Demand Intervals ..... 20 and 32 minutes  
Register ..... Clock-type, individual on each element, or  
differential for totalizing readings of both  
elements.

Modifications: The modifications from the original approval of the type "ED30" are as follows:-

- (a) Re-rating, by substituting current ranges for nominal and maximum amperes.
- (b) Substitution of re-designed current and potential transformers in the demand portion of the meter.
- (c) Revision of the method of interconnection of the watthour and demand current circuits. The method of making the series connection between the current coils of the watthour and demand meters has been to stack the leads in an assembly of washers and a tube supported by the meter terminal. Internal connection blocks have now been substituted on which interconnections are made.

*E. F. Power*  
E. F. Power,  
Assistant Director (E&G),  
Standards Division.

*R. W. MacLean*  
R. W. MacLean,  
Director,  
Standards Division.

Ref: A-632

