



DEPARTMENT OF TRADE AND COMMERCE  
STANDARDS BRANCH

OTTAWA, April 7, 1964.

MODIFICATION OF TYPE APPROVAL

SANGAMO TYPE "ED30" POLYPHASE DEMAND-ENERGY METERS

The modifications to the apparatus specified herein have 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 Modified: Type "ED30" Polyphase Demand-Energy Meters, manufactured by the Sangamo Company Limited, Leaside, Toronto 17, Ontario.

Rating of Apparatus: Ampere ratings and related data are tabulated below. For the 2-element, the 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*	.12-5**	.25-15*	.25-10**	.5-37.5	1.2-75	2.5-150
KW Full Scale	1.5	1.0	3	2	7.5	15	30
Multiplier	1	1	2	2	5	10	20
Watthour Kh	1/6	1/6	1/3	1/3	1	1-2/3	3-1/3
Maximum amperes at rated KW	7.5	5	15	10	37.5	75	150

2-1/2 Element Wye 120 or 345 volts.

Ampere Rating	.12-8.5*	.12-6**	.25-20*	.25-14**	5-40	1.2-85
KW Full Scale	3	2	7.5	5	15	30
Multiplier	2	2	5	5	10	20
Watthour Kh	1/2	1/2	1	1	2 1/2	5
Maximum amperes at rated KW	8.33	5.56	20.83	13.88	41.67	83.3

2 1/2 Element Delta 115/230 or 120/240 volts:

Ampere Rating	.12-7.5*	.12-5**	5-37.5	1.2-75	1.5-100
KW Full Scale	3	2	15	30	40#
Multiplier	2	2	10	20	40
Watthour Kh	1/3	1/3	2	3-1/3	6-2/3
Maximum Amperes at rated KW	7.5	5.0	37.5	75	100



2.

May be transformer type or self contained 1500 watt scale

\*\* Transformer type with 1000 watt scale.

# Only self-contained rating with 1000 watt scale  
all others have 1500 watt scale

Frequency 50 & 60 cycles - all ratings  
Response Period 10 and 16 minutes - all ratings  
Register Clock type, individual on each element,  
or differential for totalizing readings  
of both elements.

Modifications: These meters are identical to those approved under  
Circular SD-EA. 310A issued September 24th 1957, except that:

(a) The thermal demand element is enclosed. The 'original' ED30 meters were provided with open type demand element frames as was the type 4L2. Since experience with single phase EDA and EDS, DEA and DES, and polyphase combination meters type NB has shown that performance could be improved by using an enclosed frame, the manufacturer has modified the type ED30 to conform with the better design.

(b) The voltage rating of the  $2\frac{1}{2}$  element Wye meters is extended to cover a 345/600 volt rating. The design of these meters includes the modifications indicated above and incorporates as well potential coils rated at 345 volts but having the same volts per turn as the 120 volt coils already approved.

This amendment covers the addition of the 1000 watt scale which may be supplied in addition to the 1500 watt scale in the transformer type meter. All other self contained ratings with the exception of the  $2\frac{1}{2}$  element delta 100 ampere rating will be supplied with 1500 watt scales.

This circular replaces S-EA.590 (amended) of March 9, 1964.

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