



Department of consumer and corporate affairs / Ministère de la consommation et des corporations



STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL

T-79

OTTAWA April 1, 1974.

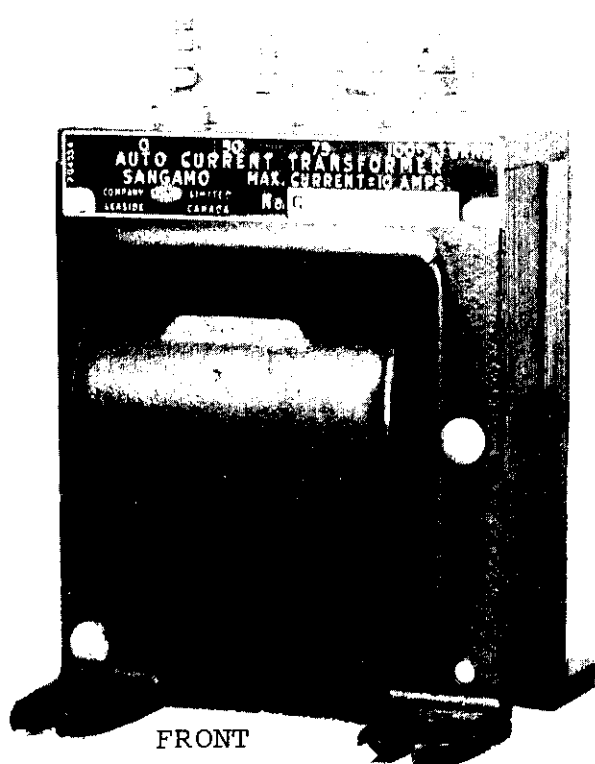
Sangamo "Standard" and "Precision" Auto Current Transformers

<u>Approved Ratios</u>	<u>Primary Terminals</u>	<u>Secondary Terminals</u>	<u>Accuracy Rating</u>
3:4	0 - 100%	0 - 75%	0.3 B0.1, B0.2; 0.6B0.5
4:3	0 - 75%	0 - 100%	0.3 B0.1, B0.2, B0.5; 0.6B0.9
2:1	0 - 50%	0 - 100%	0.3 B0.1, B0.2, 0.6B0.5, B0.9
3:2	0 - 50%	0 - 75%	0.3 B0.1, B0.2; 0.6B0.5
3:1	75% - 50%	75% - 0	0.3 B0.1, B0.2; 0.6B0.5
4:1	100% - 75%	100% - 0	0.3 B0.1, B0.2; 0.6B0.5, B0.9
Maximum Current 10 amperes in any part of the coil			
Terminals at 0, 50%, 75% and 100% of turn			

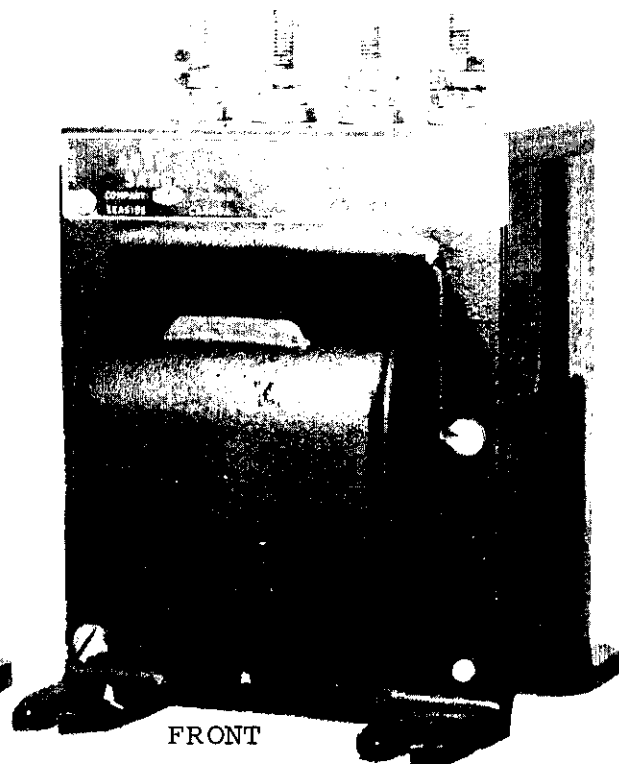
<u>Approved Ratios</u>	<u>Primary Terminals</u>	<u>Secondary Terminals</u>	<u>Accuracy Rating</u>
1:2	0 - 100%	0 - 50%	0.3B0.1; 0.6B0.2, B0.5
2:3	100% - 0	100%-33 $\frac{1}{3}$ %	0.3B0.1, B0.2, B0.5; 0.6B0.9, B1.0
2:1	0 - 50%	0 - 100%	0.3B0.1, B0.2, B0.5, B0.9, B1.0; 0.6B 1.8, B2.0
3:1	0 - 33 1/3%	0 - 100%	0.3B0.1, B0.2, B0.5, B0.9 0.6B1.0, B1.8, B2.0
3:2	100%-33 $\frac{1}{3}$ %	100% - 0	0.3B0.1, B0.2, B0.5, B0.9, B1.0; 0.6 B1.8, B2.0
3:4	100%-33 $\frac{1}{3}$ %	100%-50%	0.3B0.1, B0.2; 0.6B0.5
4:1	33 %-50%	33 %-100%	0.3B0.1, B0.2, B0.5; 0.6B0.9
4:3	100%-50%	100%-33 $\frac{1}{3}$ %	0.3B0.1, B0.2, B0.5; 0.6B0.9, B1.0
Maximum Current 5 amperes in any part of the coil			
Terminals at 0, 33 $\frac{1}{3}$ %, 50% and 100% of turns			
Frequency 60 Hertz			

STANDARD

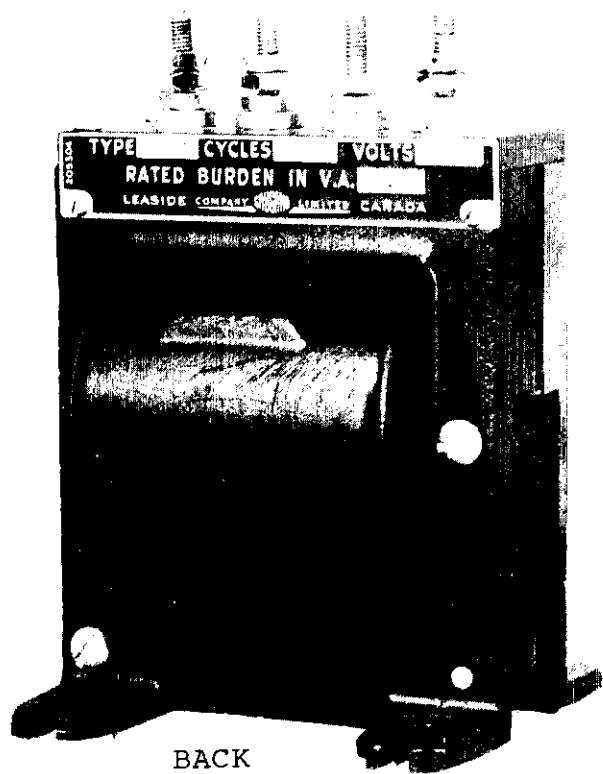
PRECISION



FRONT



FRONT



BACK



BACK

Description

These are small transformer measuring approximately 5 1/4" high by 3 1/2" wide by 3" deep. The coil is wound on a core of stacked laminations, and the whole assembly is encased in metal. Four terminals consisting of threaded studs are mounted on the top, one for each top, and their identifications are marked on the nameplate in percentage of coil turns.

Applications

These transformers are intended for use in the secondaries of main transformers for the purpose of giving a reading on a more desirable part of the scale of recording or indicating demand meters. In such circuits the terminals listed as the primary ones, in this Notice of Approval, are connected to the secondary terminals of the main transformers, and the terminals listed as the secondary ones are connected to the meter.

It is recommended that the auto transformers be installed between the test block and the meter, according to the diagrams on pages 4 and 5, keeping the secondary leads as short as possible. This is especially important when a step-up ratio of the auto transformer is used, since the external burden as seen by the main transformer is multiplied by the factor  $\frac{(\text{output current})^2}{(\text{input current})}$ .

This is a re-issue of N.R.C.-158 to list those ratios that are approved for revenue metering.

More detailed information concerning the use of these transformers in revenue metering will be given in Technical Bulletin ~~E-72/4~~.

E-74-2

NOTE:

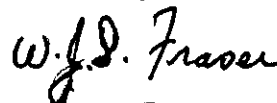
These transformers have not been assigned a type designation by the Sangamo Company. However, for the purpose of this notice, Standard and Precision are used to distinguish between the two forms.

Approval granted to:



J.L. Armstrong  
Chief, Standards Laboratory  
Metrology and Laboratory Services

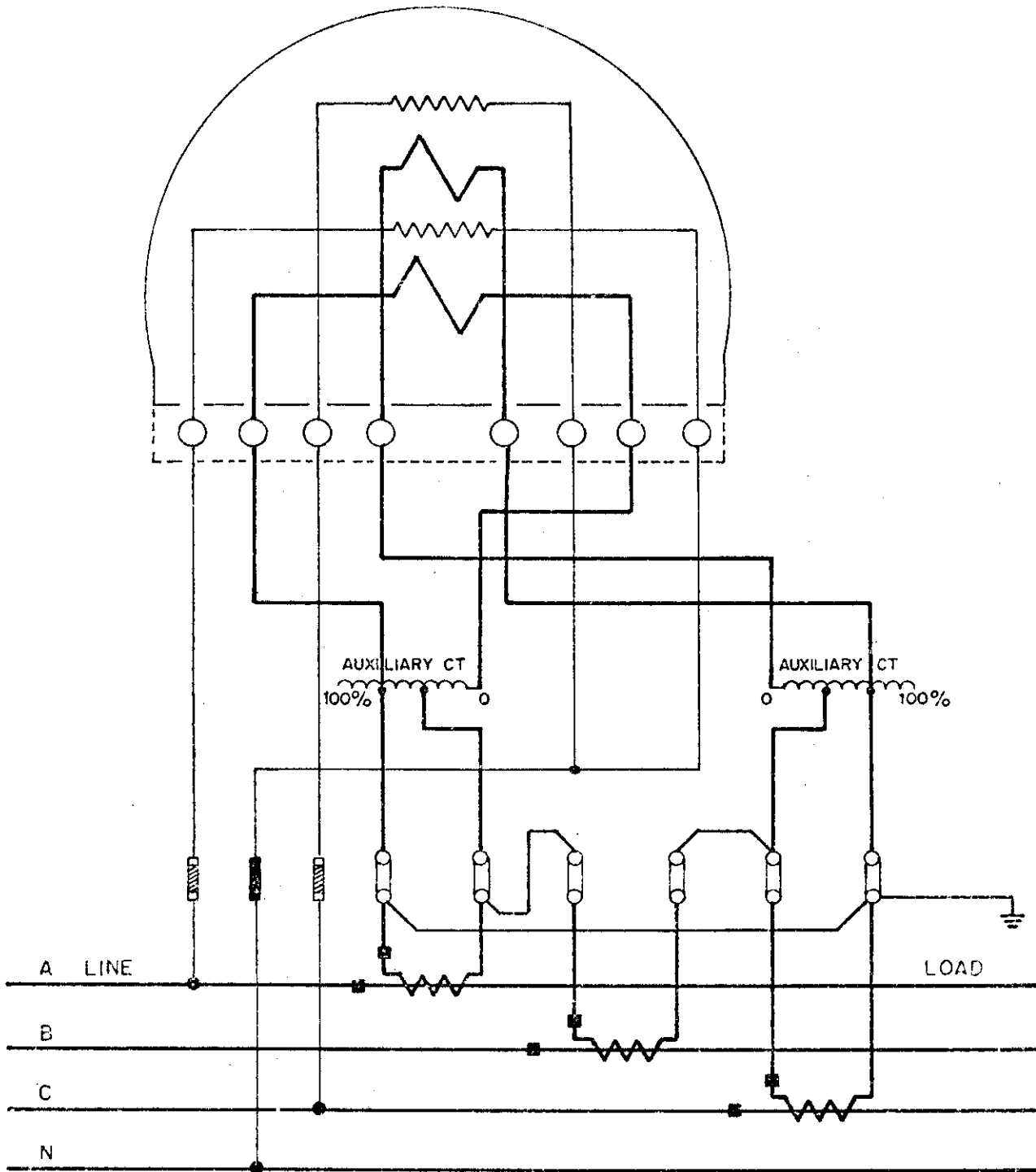
Sangamo Company Limited,  
Leaside, Toronto 17, Ontario.



W.J.S. Fraser  
Chief, Electricity & Gas Division  
Metrology and Laboratory Services

Ref: GL-1145-57/S2-154

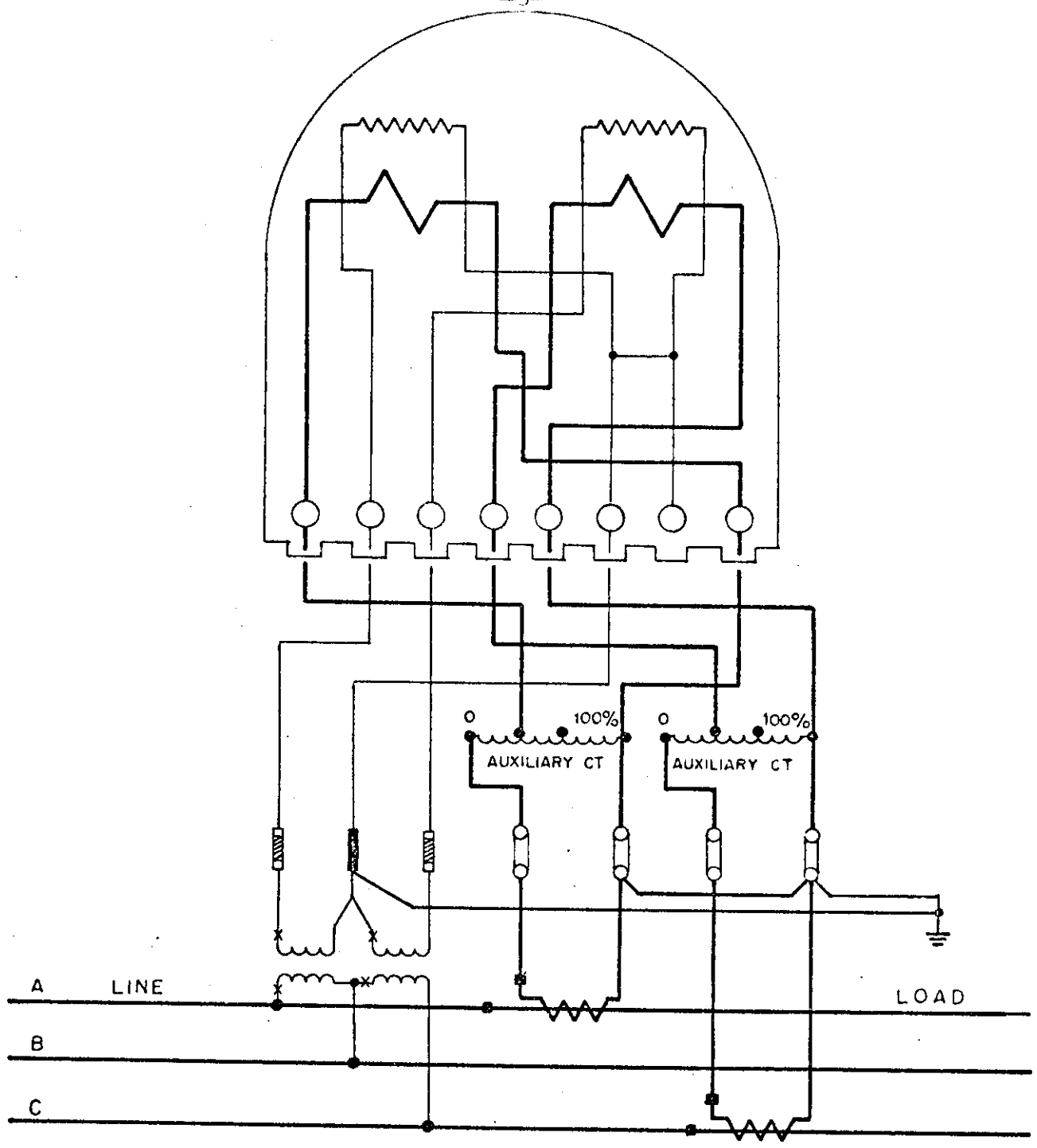
G -1145-57/S2-154



CIRCUIT : 3-PHASE, 4-WIRE Y  
 METER : 2-ELEMENT, VERTICAL, A-BASE, TRANS.-TYPE  
 TRANSFORMER : 3 C.T.,

EXAMPLE : ONE OF THE WAYS AUXILIARY C.T.s MAY BE USED

NOTE : THE COMMON TERMINAL IS GROUNDED



CIRCUIT : 3-PHASE, 3-WIRE,  $\Delta$   
METER : SANGAMO, TYPE 4L2 OR 4L3  
TRANSFORMERS : 2 C.T., 2 AUXILIARY AUTO C.T., 2 P.T.  
  
EXAMPLE : ONE OF THE WAYS AUXILIARY C.T.s MAY BE USED  
  
N O T E : THE COMMON TERMINAL IS GROUNDED