

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

# STANDARDS BRANCH - DIRECTION DES NORMES

## NOTICE OF APPROVAL

T - 2 - 1

OTTAWA January 27, 1970

CANADIAN GENERAL ELECTRIC TYPES "KG-25", "KG-34.5", "KG-46", "KG-69", "KG-92", "KG-115", "KG-138", "KG-161" and "KG-230" CURRENT TRANSFORMERS

### Group 1

Transformers with Single or Series/Parallel Primaries and Single Untapped Secondary Windings

Primary Currents 10, 20, 25, 40, 50, 75, 100, 150, 200, 300, 400, 600, 800, 1000, 1200, 1500, 2000 and 3000 amperes

Secondary Current 5 amperes
Accuracy Rating at 60 hz 0.3B0.1, B0.2, B0.5, B0.9, B1.0, B1.8, B2.0\*

Voltage Rating 25 kw to 700 kw as appearing in the type designation

52 KA 10 100 KA as ableating in the tabe designation

in kv 1.33 60 hz

Number of Secondaries
Ratios Available
Any two in the order 2:1, eg. 800x400-5
Secondary Terminals
X1 - X2, X1 has the same polarity as H1

2, single phase

Style Outdoor, post type, oil filled

\* The nameplates are marked 0.3B2.0

R. F. (rating factor)

Frequency

wire

#### Group 2

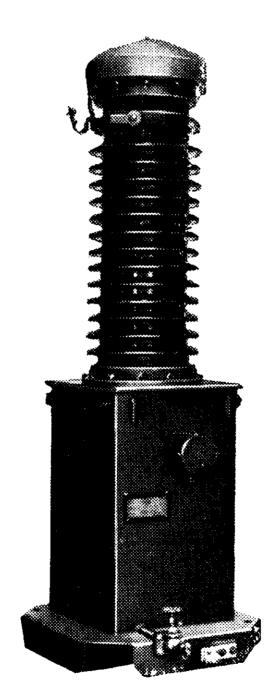
Transformers with Single or Series/Parallel Primaries and Multiple Tapped or Untapped Secondary Windings

Primary Currents 10, 20, 25, 40, 50, 75, 100, 150, 200, 300, 400, 600,

800, 1000, 1200, 1500, 2000, and 3000 amperes

Secondary Current 5 amperes, each secondary

Number of Secondaries 2 or 3



TYPE KG-11
OIL-FILLED

Accuracy Rating at 60 hz
untapped secondaries and
tapped secondaries with
proportions less than 3:1
# Tapped secondaries with
proportions between 3:1
and 6:1
# Greatest approved
proportion
Voltage Rating

R. F. (rating factor)
Frequency
Secondary Terminals
Polarity and Common
Terminals
Wire
Style

0.3B0.1, B0.2, B0.5, B0.9, B1.0, B1.8, B2.0

0.6B0.1, B0.2, B0.5, B0.9, B1.0, B1.8, B2.0

6:1
25 kv to 700 kv as appearing in the type designation in kv
1.33
60 hz
Kl, X2, X3, Xh; Y1, Y2, Y3, Y4 or Z1, Z2, Z3, Z4

X1, Y1 or Z1
2, Single Phase
Outdoor, post type, oil filled

\* Marked on the nameplate

# Proportions between 3:1 and 6:1 on transformers with tapped secondaries using terminals X1-X2, Y1-Y2 or Z1-Z2 may only be used with the series connection of the primary windings.

The proportion given here refers to the relation between the maximum rated primary current and the lower rated current when using a tap on the secondary winding. e.g., on a transformer rated at 1200x800x600x400x200-5-5 amperes, the 800-5 amp would have a proportion of 3:2, the 400-5 amp would be 3:1 and the 200-5 amp would be 6:1.

#### Description

The type "KG--" current transformers are designed for outdoor service with a large porcelain insulator mounted on a steel tank. The size of the porcelain insulator is related to the voltage rating.

The primary winding may be in two sections which can be connected in series or in parallel by means of links at the top of the porcelain.

High grade grain-oriented silicon steel is used for the cores of all ratings.

Transformers may be built with a single untapped secondary winding, or they may have 2 or 3 tapped or untapped secondary windings.

In the former case, two ratios of the order 2:1 are available depending on the primary connections.

In the latter case, in addition to ratios available by reconnecting the primaries, additional ratios are made available by taps on the secondary windings.

The maximum number of taps covered by this approval is two (2) so that only secondary terminals X1, X2, X3, X4; Y1, Y2, Y3, Y4; or Z1, Z2, Z3, Z4 will be available.

In all cases, the nameplate will indicate the primary connections and the secondary terminals to be used to obtain the desired ratio.

As each secondary of a multiple secondary transformer is completely independent, any unused secondary winding should be short-circuited over the whole winding. To prevent damage to the transformer due to its omission, this approval covers the use of Thyrite protectors across each secondary winding.

This circular is a reissue of circular T-2 to include transformers having multiple tapped secondary windings.

Approval granted to:

Canadian General Electric Company Limited, Toronto 4, Ontario.

for

Chief, Standards Laboratory

Standards Branch.

W. J. S. Fraser,

Chief, Electricity and Gas Division,

Standards Branch.

Ref: SL-100-449

SE-85-1-5