



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

**STANDARDS BRANCH - DIRECTION DES NORMES**

**NOTICE OF APPROVAL**

**T-47**

OTTAWA September 30, 1969.

GENERAL ELECTRIC TYPE "JAL-O" DIRECT BURIAL CURRENT TRANSFORMERS

|                                    | <u>Apparatus</u>   |
|------------------------------------|--|
| Primary Currents                   | 200 and 400 amperes  |
| Secondary Current                  | 5 amperes  |
| Accuracy Rating at 60 hz           |  |
| 200 amperes                        | (1) 0.3BO.1, BO.2; 0.6BO.5   |
| 400 amperes                        | 0.3BO.1, BO.2, BO.5; (1) 0.6BO.9   |
| Frequency                          | 60 hz  |
| Insulation Class                   | 600 volts  |
| R.F. (rating factor)               | 2.0  |
| Wire                               | 2  |
| Style                              | Hy-Bute 60 moulded insulation for direct burial                                  |
| Secondary leads <sup>(2)</sup>     | Moulded into the body of the transformer, each 15 feet in length                 |
| Primary conductor <sup>(3)</sup>   | Single conductor without metallic covering, shield, armour or neutral conductor  |
| Approved for use on <sup>(4)</sup> | Single phase 2- and 3-wire domestic services                                     |
| Meter potential connections        | Tapped into the main conductor on the line side within 3 feet of the transformer |
| Meter socket                       | Must be equipped with circuit closing devices in the current circuit             |

(1) The nameplates of the 200-5 amp., and the 400-5 amp., ratios are stamped 0.3BO.2 and 0.3BO.5 respectively. In both cases the standard burdens are considered to be at the ends of the integral secondary leads.

(2) The secondary leads are #10 AWS stranded wire with Versatol insulation and Geoprene jackets. The lead denoting polarity will be identified in either of the following two ways - (a) "X1-polarity" stamped in aluminum colour every 6 inches on the jacket or (b) solid red colour. The other lead will be black in both cases.

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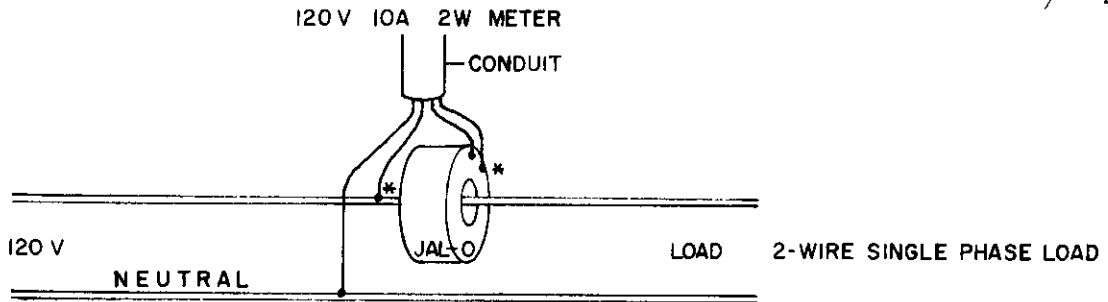


Fig. 1

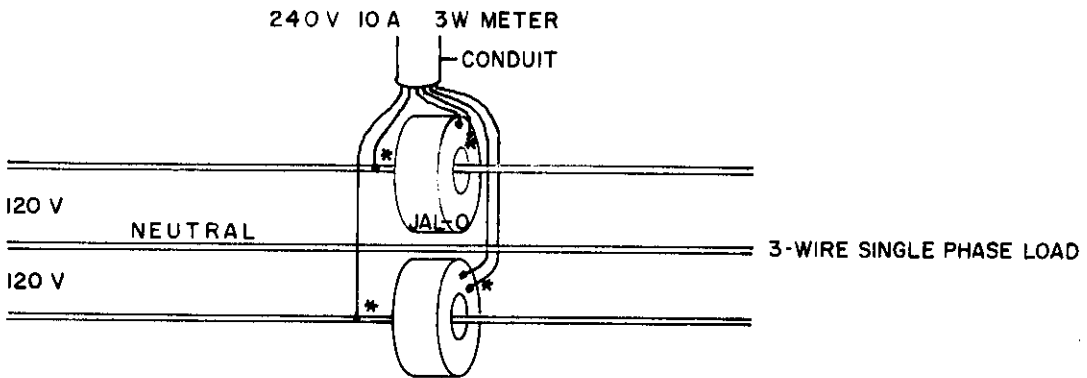


Fig. 2

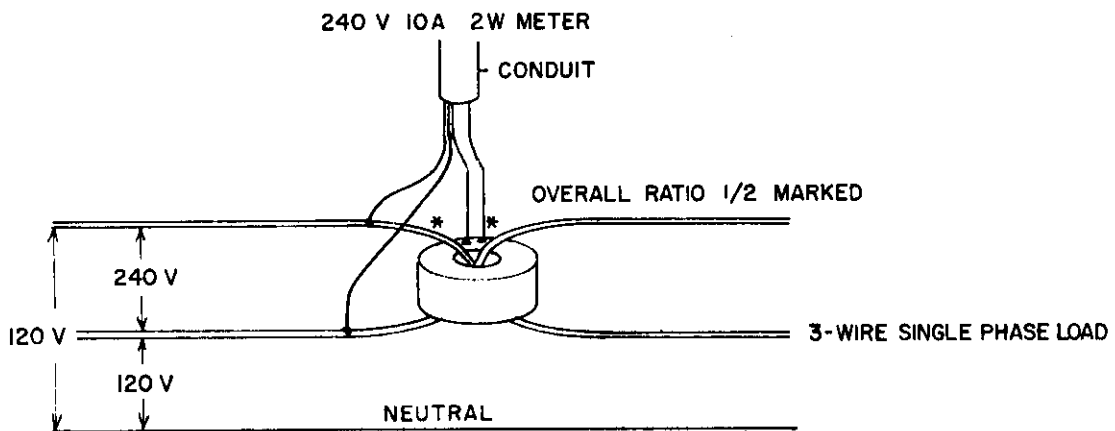


Fig. 3

NOTE 1. During installation; if the secondary leads are found to be too long, the excess may be cut off; but if they are too short the approval of the District Inspector must be obtained before they are lengthened.

(3) The primary conductor where it passes through the window of the transformer and for a distance of at least one foot from each side must not have any metallic covering such as the shield or armour. The neutral conductor must not pass through the window. This does not preclude the use of 2- or 3- conductor cable up to the transformer.

(4) For a single phase 2-wire installation, the transformer must be installed in the "hot" wire. See Fig. 1. A single phase 3-wire installation may be metered by two transformers, each in the "hot" lines and a 3-wire meter as shown in Fig. 2 or by a single transformer with both "hot" wires passing through the window in the direction indicated in Fig. 3 and a 2-wire meter.

In the latter case the multiplier will be  $\frac{1}{2}$  that marked on the transformer and must be conspicuously marked on the face of the meter except on transformer rated types in which the multiplier is incorporated in the gear train.

NOTE 2. These transformers are not approved for use on polyphase or network circuits.

NOTE 3. As these transformers are inaccessible once they have been buried, the District Inspector should arrange to be notified so that the installation may be inspected in advance.

#### Description

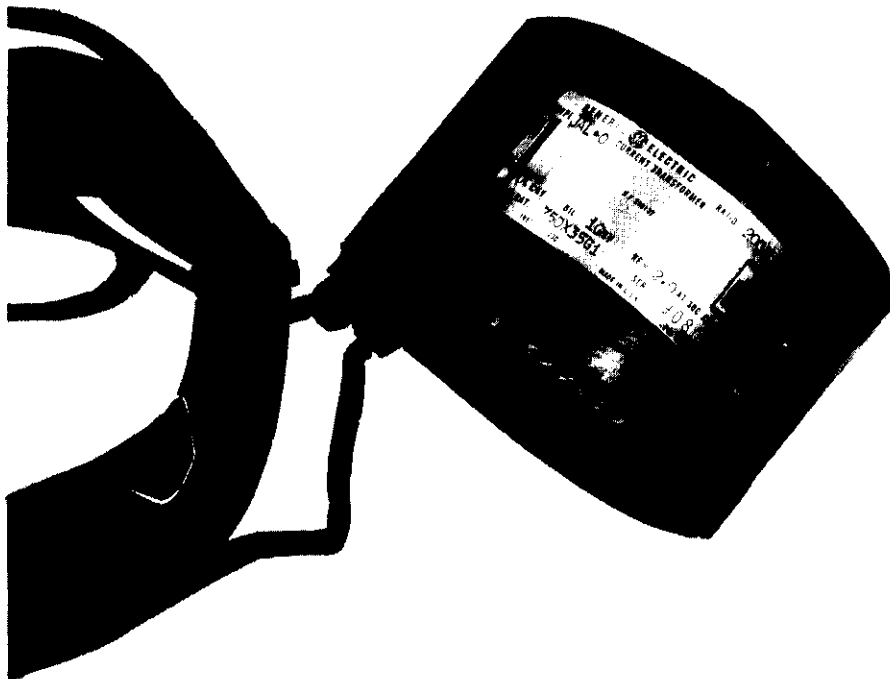
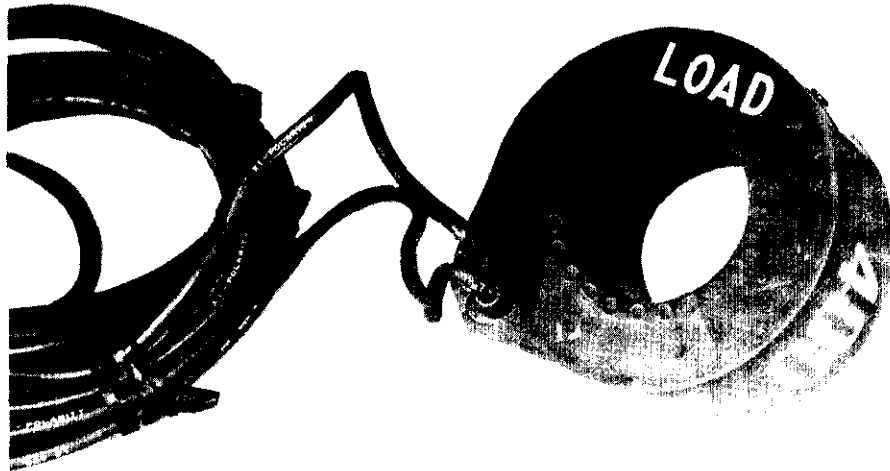
These transformers are for use on URD (underground residential distribution) circuits where the single phase loads are beyond the capacity of 200-ampere meters or where oversize service entrance cables make the use of a self-contained meter impractical.

They, along with the service conductors are designed for direct burial in the ground just outside the foundation of the residence.

The main conductors are intended to go directly to the service disconnect and distribution panel within the residence, usually near the point of entrance.

The secondary leads from the transformer(s), along with the potential leads to the meter, are intended to go, via a length of protective conduit, directly to the meter socket which is usually mounted on an outside wall of the residence.

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The current transformer secondary leads being only 15 feet in length limit the distance from the transformer to the meter.

Because these transformers do not have provision for shorting the secondary winding, and test blocks are not intended to be used, the meter socket must be equipped with circuit-closing devices to short-circuit the secondary winding of the current transformer(s) when the meter is removed.

This approval covers only transformers manufactured by the General Electric Company, Somersworth, N.H., U.S.A.

Primary polarity is indicated by "H1" and "LINE" on the primary entrance side and by "LOAD" on the other side.

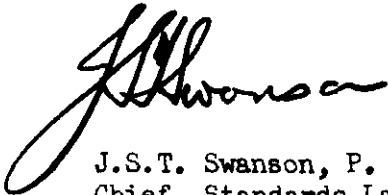
Secondary polarity is indicated in the illustration by "X1- polarity" on one of the leads, but some transformers may be encountered where this lead is red in colour.

The illustration does not show the 60 hz accuracy rating which will be marked on the nameplates of all approved transformers.

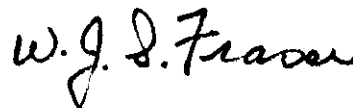
For checking installations, a sufficient length of lead must be available in the meter socket to identify the transformer secondary leads.

Approval granted to:

Canadian General Electric Company Limited,  
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