

# ***Network Transformers***



TRANSFORMATEURS L<sup>TÉE</sup>

**PIONEER**

TRANSFORMERS L<sup>TD</sup>

***AN ISO 9001 COMPANY***

**Pioneer Transformers** is a Canadian industry leader in the manufacturing of liquid-filled Distribution, Small Power and Specialty Transformers. We manufacture Subway and Vault-type Network Transformers up to 3000KVA as per ANSI standard C57.12.40 and CSA standard C199.

Pioneer has been in the transformer business for over 50 years. Our experienced design and manufacturing team is dedicated to:

- Leading design technology
- Implementation of ISO 9001
- On-Time delivery
- Total customer satisfaction.



*750 kVA 13.8kV $\Delta$ -208Y/120 V  
Network Transformer*

## Core & Coil Design

Pioneer uses core steels which are the most suitable for the application. The steel is cut in-house on TRANCO core cutting machines and then squeezed into rectangular shapes. The final cores are annealed in an inert gas oven to achieve outstanding loss performance.

The LV & HV coils are wound progressively by automatic winding machines on rectangular mandrels with epoxy bonded high density Kraft paper between the layers. The LV winding is a full width strip foil, adding strength and eliminating axial forces. The HV is a wire-wound type, wound right on top of the LV. Our design takes care to balance the HV tap connections, in order to limit all axial forces, which is very important under short circuit conditions. The coils are then oven processed, which results in the epoxy bonding the coils into one solid structure.

50 years of core & coil clamping experience result in a solidly braced design that withstands short circuit conditions.



*Core & coil assembly*

## Tanks

All tanks are of the “sealed tank” design, manufactured by an outside specialized supplier. They are designed to withstand a pressure of 7 psig and they accommodate all fittings as required by customers specifications. If necessary, radiators can be conventional panel types or parallel panel types. All tanks are surface grid-blasted and then painted with two coats of epoxy primer, followed by two coats of urethane. Special coatings are available on request.



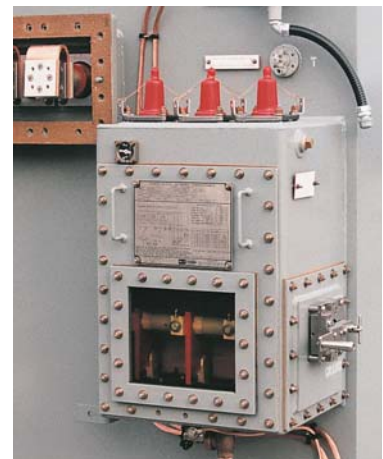
*750/840 kVA 13.8kV $\Delta$ -216Y/125 V  
Network Transformer*

## Insulation Mediums

We can supply the transformers with transformer mineral oil or, if required, with silicone or hydrocarbons like R-Temp fluid, or Envirotemp FR3

## Cable Entrance

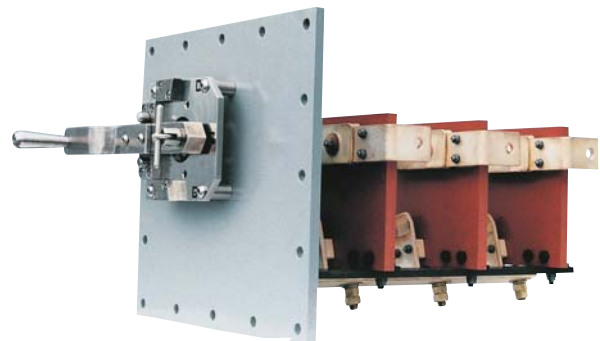
The HV terminal chamber, which is separate from the transformer tank, allows a variety of high-voltage cable terminations like wiping sleeves, stuffing boxes, potheads and apparatus bushings.



*Typical Cable Entrance*

## HV Grounding Switch.

The three-pole primary grounding switch is located in the HV switch chamber and complies with ANSI. It is available as a two or three position switch. The switch can be of the “Mag-Break” type for fast interruption of the exciting current. All interlock features comply with ANSI. All switch handle parts exposed to the atmosphere are made of solid stainless steel.



*HV Grounding Switch*



**Granby, Quebec**

### **Head Office & Plant:**

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### **Quotation & Engineering:**

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Please visit our web site at  
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to get in touch with your local sales representative



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