Date:

Vikrant Transformers

Introduction

Vikrant Transformers is a reputed manufacturer of power and distribution transformers. They are having fully equipped workshop and technically qualified personnel with rich experience in the field of manufacturing power and distribution transformers upto 2 MVA, 33 KV.

Vikrant Transformers was founded in 1991 by an able enterpreneur Mr. Girish Patel. The company is a family owned business that is able to move quickly for its customers, because of its quality practices and philosophy. Our business is helping your business react to market changes quickly and assured through quality and on-time delivery.

Expertise

- Power and distribution transformers up to 2 MVA, 33 KV.
- For the repairing of weir and distribution transformers upto 5000 KVA, 66 KV.
- For Transformers oil filtration on site.
- For installation and commissioning of power and distribution transformers at your site.
- Annual Contract for servicing of your transformers at your site.

Objectives

- To establish and monitor quality management system.
- To provide prompt customer support service.
- To harness available techno-commercial resources for development.
- To enrich competence of every one through relevant training.

Types of Transformer made by Vikrant Transformers

- Distribution transformers upto 2000 KVA, 33 KV Class
- Step up transformers upto 2000 KVA, 33 KV Class
- Earthing Transformers

Equipments used in Transformer

Core: The core is built up from interleaved cold rolled grain oriented steel laminations, coated with an insulating material which is both heat and oil resistant. The cores are assembled on steel channels and clamped in a manner to reduce vibration and inherent voice to minimum. All cores have mitered joints.

Windings: Transformers windings are designed to met three fundamental requirements. **Mechanical, thermal and electrical**. They are cylindrical in shape and are assembled concentrically. Interlayer cooling ducts are provided to ensure that the temperature gradient between winding and oil and hence the hot spot temperature is kept as low as possible. This means that the rate of insulation deterioration is minimized and a high life expectancy is achieved. Insulation between layers and turns is based upon the impulse test level of the voltage class of the winding as specified in ISS 2026-1977.

Tapping: Tappings are provided on HV voltage +-2.5% and +- 5%. Tap selection is effected by means of an off circuit tapping switch operated by an external handle on the cover.

Tank: The tank is made from mild steel which is electrically welded. Tank is adequately stiffened to withstand air pressure of 0.8 Kg/cm2 and vacuum of 0.7 kg/cm2. All tanks are applied with one coat of Zinc Chrome primer and two coats of synthetic enamel paints. The inside of tank is provided with heat and oil resistance paints.

Termination: All the bushing and its metal parts are of high quality and confirming to the relevant ISS 3347.

Overloads: Transformers can be overloaded in accordance with ISS 6600.

Vector Group: The transformers are generally connected DY11 (Delta Star). However they can manufacture on any vector group as per ISS 2026-1977.

Operating Conditions: The standard range of transformers described in this specification are designed for continuous operation at rated voltage and frequency resulting top oil temperature rise of 500C by thermometer and 550c of winding of resistance.

Insulation in impregnation: The principal components of insulation are made from high quality pressure board / haldullingum / permawood. The oil used for impregnation confirms to IS 335.

Ability to withstand short circuit: In order to prevent deformation when subjected to short circuit forces, solid block end insulation backed up by substantial supporting frames is utilized. The axial end trust under fault conditions is minimized by the suitable distribution of the ampere turns over the length of the windings and by ensuring that the design dimensions are closely adhered to during manufacturing. The transformers designed and manufactured to withstand short circuit conditions as laid down in ISS 2026-1977.

Tolerance: No load losses, voltage ration, impedance voltage are subject to tolerance as per ISS 2026-1977.

Fittings: Following standard fittings are provided on transformer

- Oil conservator with plain oil gauge, filling hole with cap and drain plug.
- One Silica Gel dehydrating Breather
- One Off circuit externally operated tapping switch with position indicator, handle and locking device.
- 4 Bi Directional flat rollers.
- Explosion Vent
- 1 Thermometer Pocket.
- 1 Drain Valve with plug.
- 2 lifting lugs.
- 2 earthing terminals.
- 1 rating and diagram plate
- 1 Air release plug