



Proper Storage of VanTran Oil Filled Transformers

Inspection

VanTran products are in first class operating condition when they are shipped. However, they should be carefully inspected for any damage which may have occurred, or for parts which may have loosened, during shipping. Carefully inspect the paint finish and repair damaged paint surfaces prior to placing the unit in service or storage.

Handling

A transformer should never be lifted or moved by jacks or tackle under the drain valve, bushings, or other accessories, Bushings, leads, arresters, etc. should never be used as a handle to move the transformer. Lifting lugs are provided for the safe hoisting and lifting of the unit. When rollers are used under large transformers, skids must be used to distribute the stress evenly over the base. Never double stack or store units where they will be subject to external damage.

Storage for Up to 90 Days

All VanTran transformers have been thoroughly dried at the factory and shipped with oil at the correct level. Transformers should always be stored with this oil in place to prevent possible contamination and absorption of moisture. Transformers should be stored in a dry location having no rapid or radical temperature changes. If possible, the transformer should be stored in its permanent location on the foundation which has been prepared for it. If the permanent foundation is not available, it should be stored in its correct upright position on a level foundation capable of withstanding the weight of the unit without deformation. Never store a transformer solely under their jacking steps, on jacks, or on temporary blocking. Never store the transformer on rollers. Never store the unit in or near standing water or in areas with high moisture, salt levels, or corrosive gases in the air.

Storage Over 90 Days

All VanTran transformers are shipped with a 2 psi dry nitrogen blanket. During long-term storage, it is recommended that this nitrogen blanket be maintained by the addition of a bottle of dry nitrogen, through a regulator, to the transformer tank. If the unit is equipped with anti-condensation heaters in the control cabinets, they should be energized and checked for proper operation. Units with any enclosed air-filled spaces, such as control cabinets and Air Terminal Chambers, should be supplied with an appropriate amount of moisture absorbing desiccant packets. Desiccant should be monitored and replaced in regular maintenance intervals as moisture levels in the storage area dictate.

Radiators

VanTran ships all transformers, when possible, completely assembled and ready for use. In the event that removable radiators are shipped separately to accommodate shipping or space requirements, radiator openings are shipped with temporary protective caps. Ensure these protective caps are tightly



sealed before storage. Radiator assemblies should never be stored directly on the ground or in areas in which water could collect near sealed openings.

Removal From Storage

When a transformer is placed into service after periods extending longer than 90 days, basic electrical tests should be conducted before initial energization. These tests should be performed by qualified technicians and include a DC Insulation Test and Total Turns Ratio (TTR) Test. The results of these tests should be verified with the original factory test results to ensure they are still within acceptable limits.