

MAINTENANCE, OPERATING AND INSTALLATION INSTRUCTIONS DRY-TYPE GENERAL PURPOSE TRANSFORMERS

1. GENERAL:

Your transformer is designed for safe, cool, and quiet operation for a long time with minimum maintenance, provided certain guidelines are observed during installation.

Warning - DANGER: Power must be off before working inside a transformer.

2. INSPECTION UPON RECEIPT:

Upon receipt of transformers, check them against the shipping list. If any damage is discovered, file a claim immediately with the carrier.

3. HANDLING:

Core and coil units should be left on the skid for handling because the mounting structure is not designed for skidding or rolling. Lifting eyes are located on the top frame of the core & coil assemblies. The eyes are designed to allow overhead lifts with a crane.

<u>CAUTION</u> – Never attempt to lift a transformer from points other than the lifting eyes provided on the enclosure. No transformer should be laid on its side or end for any reason. The windings, structure, and vibration isolators are designed to handle the normal weight and stress from shipment and usage. These parts are not designed to accept stresses from tipping or similar actions. Damage beyond repair can occur if transformer is turned on its side or end.

4. STORAGE:

Transformers which are not installed and energized immediately should be stored in a dry clean space having a uniform temperature to prevent condensation.

5. INSTALLATION:

Enclosure Type:	Dry type transformers are for indoor use unless the enclosure is specifically designed for outdoor service.
Ventilation:	Provide adequate and unrestricted room for air flow through the vent openings of the enclosure, At a minimum, allow a
	clearance of 25mm (1in) for wall mounting, 150mm (6in) on the other two sides and 300mm (12in) on top of the enclosure.
Location:	Install in a dry, clean, and accessible area. Dry-Type Transformers must be installed in an upright position.
Sound Level:	Transformer noise is an inherent characteristic and can not be completely eliminated. To minimize it, use resilient mounting
	pads and avoid locations (such as centre of long wall) that amplify the noise.
	9 kVA to 75 kVA transformers are provided with 2 sets of brackets: 1 for floor and 1 for wall mounting. Wall brackets are
-	turned in for shipping. Please turn bracket out for wall mounting.

CAUTION - Only experienced and qualified personnel should perform Installation.

<u>5.1 Connections</u>: Refer to the nameplate or the enclosed connection diagram for the primary and secondary voltages, tap arrangements, phases, and ratings at each tap. Do not make any connections other than those shown on the diagrams supplied. To ensure good electrical connections, the following torque values must be adhered to:

- 1/4-20 Bolt 7 ft. lb.
- 3/8-16 Bolt 20 ft. lb.
- 1/2 -13 Bolt 30 ft. lb.

<u>CAUTION</u> - Before energizing, check all bolted connections for tightness to ensure good electrical connections. To prevent damage to the load, the output voltage on all terminals should be checked to insure that it agrees with the nameplate information and load ratings prior to connecting the load.

5.2. Grounding: A transformer ground stud or ground bus is provided. Follow the local electrical codes for grounding the transformer.

6. OPERATION: To maintain safe operating conditions, do not remove panels or covers over openings in the enclosure while the transformer is energized.

7. MAINTENANCE:

7.1 Inspection: Inspection should be made at regular intervals:

- a) Dirt accumulation on insulating surface or restricting air flow.
- b) Loose connections.
- c) Signs of overheating and of voltage creepage over insulating surfaces as evidenced by tracking or carbonization.

<u>7.2 Cleaning</u>: To permit free air circulation and to guard against the possibility of insulation breakdowns, dirt should be removed. The windings may be cleaned with a vacuum cleaner, a blower, or with dry compressed air.

<u>8. Warranty</u>: Transformer Source warrants to its customers that the products delivered conform to the specifications and are free from defects in material and workmanship for a period of one year. For additional detail, consult factory or visit website.