

INSTRUCTION SHEET A1

INSTALLATION, OPERATION AND MAINTENANCE OF GENERAL PURPOSE DRY TYPE TRANSFORMERS 600 VOLTS AND BELOW

1. GENERAL

The installation, operation and maintenance of dry type transformers should be performed by an electrician or other qualified personnel who are familiar with international, national, and/or local electrical codes and with the potential shock hazards associated with electrical equipment.

These instructions cover two types of enclosure construction: ventilated and encapsulated.

A) Ventilated units are NEMA type 2 enclosures suitable for indoor use. They are UL-3R listed and CSA certified for outdoor use with the addition of an optional weather shield kit. The proper weather shield part number is listed on the nameplate.

B) Encapsulated units are NEMA 3R enclosures suitable for either indoor use in harsh environments or for outdoor use. CE marked units have a protection index of IP23.

This transformer is ready for installation and operation. It must be installed per the National Electrical Code® and local code requirements. It is recommended that these instructions be read carefully prior to installation and kept for future reference.

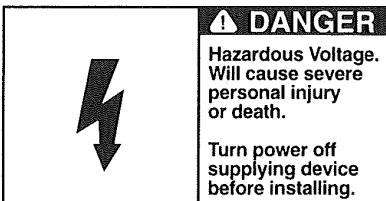
CE marked transformers must be installed per EN 60742.

2. INSPECTION AND HANDLING

The transformer should be inspected carefully upon receipt to check for any visible or concealed damage that may have occurred during shipment. If damage is found, a claim should be filed immediately with the carrier.

Single and three phase transformers, in smaller KVA sizes, are provided with lifting ears. Larger KVA sizes are palletized and can be lifted with appropriately sized fork lifts or hoisted by the lifting lug bolts provided on the core frame after removal of the top cover. Incorrect handling can bend the enclosure or cause other damage or result in personal injury.

3. INSTALLATION



WARNING: There is a potential danger of electrical shock when working on electrical equipment! Make sure power is off before installation. Replace all covers before energizing transformer.

A) Ventilated Dry Type Transformers

Ventilated units can be installed indoors or outdoors. Outdoor installation requires the addition of a weather shield to be UL-3R listed. For outdoor installation, check electrical codes for the proper protection of transformer against adverse weather conditions.

Ventilated units should be installed in a upright position on walls (optional wall mounting brackets are available for certain KVA sizes), beams, platforms, floors or other structures capable of supporting their weight.

The ambient air should be dry and free from dust, dirt, corrosive fumes, heat or other adverse conditions. The unit should be installed a minimum of 6" from the wall or other obstructions that might prevent proper air flow through the vents.

Ventilated transformers are designed for operation in an average ambient temperature of 30 degrees C (86° F) and a maximum of 40 degrees C (104° F) not to be exceeded.

Large KVA sizes contain "shipping bolts" to prevent damage during shipping. These should be removed just prior to installation of the unit.

B) Encapsulated Dry Type Transformers

Encapsulated units can be installed indoors or outdoors. When installed outdoors, these units should be installed with the wiring compartment down to prevent the entrance of moisture. Some encapsulated units have a top entry wiring compartment and can be installed vertically (wiring compartment up).

For indoor floor mounting of an encapsulated unit that has a bottom entry wiring compartment, the unit can be installed horizontally (on its back side) for ease of making wire connections.

4. ELECTRICAL CONNECTIONS

WARNING: Danger of electrical shock! Do not remove parts or make connections while the transformer is energized.

Refer to the transformer nameplate label or enclosed wiring diagram for primary and secondary voltage combinations, frequency and number of phases. Tap connections and voltage combinations are also listed on the diagram or nameplate.

CAUTION: Do not make connections other than those shown. The transformer must be as large (KVA) as the load it must operate. Never exceed the nameplate rating as this could result in overheating, reduced life expectancy, or in worst cases, fire.

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