

SECTION 16461 - DRY TYPE TRANSFORMER

PART 1 - GENERAL

- 1.01 Dry-type transformer KVA, Primary Voltage, and Secondary Voltage shall be as listed within the specification or as shown on the drawings and have a UL Class 220 deg.C insulation system, 150 deg.C temperature rise under full load for Single Phase Units 15-250 KVA & Three Phase Units 15-500 KVA. UL Class 180 deg.C insulation system, 115 deg.C temperature rise under full load for Single Phase Units .500-10 KVA & Three Phase Units 3-9 KVA. UL Class 105 deg.C insulation system, 55 deg.C temperature rise under full load for Single Phase Units .05-.250 KVA. Transformer shall be listed by Underwriters' Laboratories, Inc., and comply with the latest NEMA and ANSI standards. All systems shall be Delta-Y 600 Volts and below unless indicated otherwise by the Owner.
All Medium Voltage transformers above 600 Volts shall be Grounded Y unless indicated otherwise by the Owner.
- 1.02 Neutral terminal ("Xo") of the transformer shall be grounded to building ground.
- 1.03 Transformer shall have taps on the primary winding with ratings of 2 to 2-1/2% full capacity above normal and 2 to 2-1/2% full capacity below normal. The core assemblies shall be permanently grounded to the enclosure with a flexible conductor of adequate size. The 2-phase wye connected transformer shall be provided with a flexible conductor for grounding the neutral.
- 1.04 The transformer shall be tested and certified not to exceed sound levels established by NEMA standards. The core and coil assembly shall be mounted on isolating pads so as to effectively dampen vibration transmission to the enclosure with no metal-to-metal contact.
- 1.05 The transformer enclosure shall be constructed of heavy-gauge sheet steel. Ventilated openings shall not allow the insertion of any rod of 1/2" diameter into the transformer enclosure. The enclosure shall have removable panels to permit access to transformer terminals. A threaded ground stud shall be provided on the exterior of the enclosure to conform to the requirements of Article 250 of the National Electrical Code. On larger units, lifting lugs shall be provided at top for ease of handling. Each enclosure shall be cleaned, phosphatized, primed and painted with baked enamel.
- 1.06 All connections to transformers shall be made with flexible conduit.
- 1.07 All transformers used on the exterior shall have a weather rated enclosure.

UNIVERSITY OF NEW HAMPSHIRE
CONSTRUCTION AND RENOVATION STANDARDS

PART 2 - PRODUCTS

- 2.01 Medium Voltage Transformers above 2400 volts:
General Electric
RTE
ASEA Brown Boveri (ABB)
- 2.02 Low Voltage Transformers below 600 volts:
General Electric
Cutler Hammer/Westinghouse
Square D
ACME
SOLA/HEVI-DUTY

END OF SECTION