Part 1 General

1.1 RELATED WORK

.1 Section 26 00 10 – Basic Electrical Materials and Methods

.2 Section 26 05 25 – Grounding

1.2 SUBMITTALS

.1 Submit product data in accordance with Section 26 00 10.

Part 2 Products

2.1 MATERIALS

.1 Dry-type transformers: to CSA C9-M1981 and CAN/CSAC-802.2-00 and USA NEMA TP-1, or latest revision.

.2 Use distribution transformers of one manufacturer throughout project.

2.2 TRANSFORMERS – VENTILATED

.1 Type: ANN.

.2 3-phase, 600V Delta, primary 120/280V "Y", secondary 60 Hz.

.3 kVA capacities as indicated.

.4 150°C (302°F) temperature rise insulation system.

.5 Basic Impulse Level (BIL): standard.

.6 Hi-pot: standard.

.7 Average sound level: standard.

.8 Impedance at 170°C (338°F): standard.

.9 Enclosure: air ventilated sprinklerproof NEMA/CSA (type 3R enclosures and labelled accordingly), removable metal front panel. Rear panel shall be unremovable.

.10 Mounting: floor, wall or ceiling suspended as indicated.

.11 Finish: in accordance with Section 26 00 10.

.12 Primary taps: two 2 ½% FCAN and two 2 ½% FCBN.

.13 Windings: copper.

2.3 TRANSFORMERS – NON-VENTILATED

.1 Epoxy potted.

.2 3-phase, 600V Delta, primary 120/208V "Y", secondary 60 Hz.

.3 115° temperature rise insulation system.

.4 Basic Impulse Level (BIL): standard.

.5 Hi-pot: standard.

.6 Average sound level: 45 dB.

.7 Impedance at 170°C [338°F]: standard.

.8 Enclosure: sealed.

.9 Mounting: floor or wall as indicated.

.10 Finish: in accordance with Section 26 00 10.

.11 Windings: copper.

2.4 MANUFACTURERS

.1 Acceptable manufacturers: Westinghouse, Federal Pioneer, Square D, Hammond, Delta, REX and BEMAG.

Part 3 Execution

3.1 MOUNTING

.1 Mount dry-type transformers on floor with a 4" (100 mm) high concrete housekeeping pad, unless otherwise indicated.

.2 Suspend dry-type transformers from structure on a U-channel and threaded rod support system complete with insulation springs, as indicated. Maximum size shall be 75kVA. Submit installation detail to structural consultant for review.

.3 Allow 6" (150 mm) of clearance from walls and 4" (100 mm) from adjacent equipment for ventilation.

.4 Install transformers in level upright position.

.5 Remove shipping supports only after transformer is installed and just before putting into service.

.6 Loosen isolation pad bolts until no compression is visible.

.7 Mount transformers with vibration isolators.

.8 Install epoxy potted transformers on wall, unless otherwise indicated.

3.2 CONNECTIONS

.1 Make final connections with liquid tight flexible conduit to mitigate vibration.

.2 Energize transformers immediately after installation is completed, where practicable.

.3 Provide grounding as per Section 26 05 25.

3.3 EQUIPMENT IDENTIFICATION

.1 Size 7 label in accordance with Section 26 00 10.

END OF SECTION