

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Bus plug-in devices.

1.2 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Show the following:

1. Clearances for access above and to the side of enclosed bus plug-in device.
2. Support locations, type of support, and weight on each support.

B. Product Certificates: For each type of enclosed bus assembly, signed by product manufacturer.

1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."
2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

1.3 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For enclosed bus assemblies to include in emergency, operation, and maintenance manuals.

1.4 QUALITY ASSURANCE

A. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

1. Testing Agency's Field Supervisor: Person currently certified by the InterNational Electrical Testing Association or the National Institute for Certification in Engineering Technologies to supervise on-site testing specified in Part 3.

B. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

C. Source Limitations: Obtain enclosed bus plug-in devices through one source from a single manufacturer.

D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

E. Comply with NEMA BU 1, "Busways."

F. Comply with NFPA 70.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle enclosed bus plug-in devices according to NEMA BU 1.1, "General Instructions for Proper Handling, Installation, Operation and Maintenance of Busway Rated 600 Volts or Less."

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Shall match existing bus manufacturer :

2.2 PLUG-IN DEVICES

- A. Plug in devices shall make a positive ground connection to the housing and shall not be connectable or removable while the unit is in the "on" position. Plug-in units shall be rated for the available fault current and conform with other applicable sections of these specifications.
- B. Fusible Switches: NEMA KS 1, heavy duty; with fuse clips to accommodate specified fuses; hookstick-operated handle, lockable with two padlocks, and interlocked with cover in closed position. See Division 26 Section "Fuses" for fuses and fuse installation requirements.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install bus plug-in units. Support connecting conduit independent of plug-in unit.
 - 1. Hangers shall not be installed so as to block plug-in openings.
 - 2. Hangers shall be sway braced for unbalanced weight of plug-in units plus weight of a 250 lb person on a ladder at the height of the busway installation.
 - 3. Provide flexible raceway connection to plug-in units to permit removal.

3.2 CONNECTIONS

- A. Ground equipment according to Division 26 Section "Grounding and Bonding for Electrical Systems."
- B. Connect wiring according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."

3.3 FIELD QUALITY CONTROL

- A. Perform tests and inspections and prepare test reports.
- B. Tests and Inspections:
 - 1. Tests referenced in subparagraph below are from NETA Acceptance Testing Specification and include inspection procedures to verify proper installation. They also in

clude tests and measurements of insulation resistance and turns ratios. Cost of extensive testing may not be warranted for some projects. Revise subparagraph to suit Project.

2. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
- C. Remove and replace units that do not pass tests and inspections and retest as specified above.
- D. Test Labeling: On completion of satisfactory testing of each unit, attach a dated and signed "Satisfactory Test" label to tested component.

3.4 CLEANING

- A. Vacuum dirt and debris; do not use compressed air to assist in cleaning.

3.5 PROTECTION

- A. Provide final protection to ensure that moisture does not enter bus assembly.

END OF SECTION