

SECTION 26 11 16 {16362}

SECONDARY UNIT SUBSTATIONS

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This section includes secondary unit substations with medium voltage (to 34.5 kV) primaries and low voltage secondaries.

Manufacturers listed in this section were identified as representative and not as an endorsement for meeting this specification. For additional product information, visit 4Specs at www.4specs.com, ARCAT at www.arcat.com, First Source at www.reedfirstsource.com, SpecSource at www.specsource.com, and Sweets Network at products.construction.com.

This section includes performance, proprietary, and descriptive type specifications. Edit to avoid conflicting requirements.

Contact the CSRF Support Center at supportcenter@csrf.org to submit comments or suggestions for improvements to this specification. Visit the SPECTEXT web site at www.spectext.com for current product announcements.

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes secondary unit substation and accessories.
- B. Related Sections:
 - 1. Section 26 28 13 - Fuses: Low-voltage fuses.
- C. Related Sections:
 - 1. Section 16491 - Fuses: Low-voltage fuses.

1.2 REFERENCES

List reference standards included within text of this section. Edit the following for Project conditions.

- A. American National Standards Institute:
 - 1. ANSI C12.1 - Code for Electricity Metering.
 - 2. ANSI C37.06 - American National Standard for Switchgear - AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis - Preferred Ratings and Related Required Capabilities.
 - 3. ANSI C37.46 - Special Power Fuses & Fuse Disconnecting Switches.
 - 4. ANSI C39.1 - Requirements, Electrical Analog Indicating Instruments.

5. ANSI C57.12.27 - Conformance Standard for Liquid-Filled Distribution Transformers Used in Pad-Mounted Installations Including Unit Substations.
 6. ANSI C57.12.28 - Pad-Mounted Equipment - Enclosure Integrity.
 7. ANSI C57.12.55 - Dry Type Transformers in Unit Installations, Including Unit Substations-Conformance Standard.
- B. Institute of Electrical and Electronics Engineers:
1. IEEE 48 - Standard Test Procedures and Requirements for Alternating-Current Cable Terminations 2.5 kV Through 765 kV.
 2. IEEE C37.04 - Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis.
 3. IEEE C37.11 - Standard Requirements for Electrical Control for High-Voltage Circuit Breakers Rated on A Symmetrical Current Basis.
 4. IEEE C37.20.1 - Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear.
 5. IEEE C37.20.2 - Standard for Metal-Clad and Station-Type Cubicle Switchgear.
 6. IEEE C37.20.3 - Standard for Metal-Enclosed Interrupter Switchgear.
 7. IEEE C57.12.00 - Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers.
 8. IEEE C57.12.90 - Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers and IEEE Guide for Short Circuit Testing of Distribution and Power Transformers.
 9. IEEE C57.12.91 - Standard Test Code for Dry-Type Distribution and Power Transformers.
 10. IEEE C57.13 - Standard Requirements for Instrument Transformers.
 11. IEEE C57.94 - Recommended Practice for Installation, Application, Operation, and Maintenance of Dry-Type General Purpose Distribution and Power Transformers.
 12. IEEE C57.106 - Guide for Acceptance and Maintenance of Insulating Oil in Equipment.
 13. IEEE C57.111 - Guide for Acceptance of Silicone Insulating Fluid and Its Maintenance in Transformers.
 14. IEEE C57.121 - Guide for Acceptance and Maintenance of Less-Flammable Hydrocarbon Fluid in Transformers.
 15. IEEE C62.41 - Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.
- C. National Electrical Manufacturers Association:
1. NEMA AB 1 - Molded Case Circuit Breakers and Molded Case Switches.
 2. NEMA FU 1 - Low Voltage Cartridge Fuses.
 3. NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
 4. NEMA PB 2 - Deadfront Distribution Switchboards.
 5. NEMA PB 2.1 - General Instructions for Proper Handling, Installation, Operation, and Maintenance of Deadfront Distribution Switchboards Rated 600 Volts or Less.
- D. International Electrical Testing Association:
1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.