

SECTION 263600 - TRANSFER SWITCHES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Automatic Transfer Switch.

1.2 RELATED REQUIREMENTS

- A. Section 003000 - Alternates
- B. Section 260553 - Identification for Electrical Systems: Engraved nameplates.
- C. Section 263213 - Engine Generators: Testing requirements.

1.3 REFERENCE STANDARDS

- A. NEMA ICS 10 - Industrial Control and Systems: AC Transfer Switch Equipment; National Electrical Manufacturers Association; 2005.
- B. NETA STD ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems; International Electrical Testing Association; 2009.
- C. NFPA 70 - National Electrical Code; National Fire Protection Association; 2008.

1.4 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide catalog sheets showing voltage, switch size, ratings and size of switching and overcurrent protective devices, operating logic, short circuit ratings, dimensions, and enclosure details.

1.5 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Products: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. ASCO Power Technologies, LP: www.asco.com.

- B. Eaton Corporation; Cutler-Hammer Products: www.eaton.com.
- C. Substitutions: See Section 016000 - Product Requirements.

2.2 AUTOMATIC TRANSFER SWITCH

- A. Description: NEMA ICS 10, automatic transfer switch suitable for use as service equipment.
- B. Configuration: Electrically operated, mechanically held transfer switch.

2.3 COMPONENTS

- A. Indicating Lights: Mount in cover of enclosure to indicate NORMAL SOURCE AVAILABLE.
- B. Test Switch: Mount in cover of enclosure to simulate failure of normal source.
- C. Return to Normal Switch: Mount in cover of enclosure to initiate manual transfer from alternate source to normal source.
- D. Transfer Switch Auxiliary Contacts: 1 normally open; 1 normally closed.
- E. Normal Source Monitor: Monitor each line of normal source voltage and frequency; initiate transfer when voltage drops below 85 percent or frequency varies more than 3 percent from rated nominal value.
- F. Alternate Source Monitor: Monitor alternate source voltage and frequency; inhibit transfer when voltage is below 85 percent or frequency varies more than 3 percent from rated nominal value.
- G. In-Phase Monitor: Inhibit transfer until source and load are within ____ electrical degrees.
- H. Switched Neutral: Overlapping contacts.
- I. Enclosure: ICS 10, Type 1, finished with manufacturer's standard gray enamel.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that surface is suitable for transfer switch installation.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Provide engraved plastic nameplates under the provisions of Section 260553.

3.3 FIELD QUALITY CONTROL

- A. Perform field inspection and testing in accordance with Section 014000.
- B. Inspect and test in accordance with NETA STD ATS, except Section 4.
- C. Perform inspections and tests listed in NETA STD ATS, Section 7.22.3.

3.4 CLOSEOUT ACTIVITIES

- A. Demonstrate operation of transfer switch in bypass, normal, and emergency modes.

3.5 MAINTENANCE

- A. See Section 017000 - Execution Requirements, for additional requirements relating to maintenance service.
- B. Provide service and maintenance of transfer switches for one year from Date of Substantial Completion.

END OF SECTION