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### 262923 - Variable Frequency Motor Controllers

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## **SECTION 26 2923 – VARIABLE-FREQUENCY MOTOR CONTROLLERS**

### **1.1 SUMMARY**

- A. Section Includes Solid-state, PWM, variable frequency drives for speed control of three-phase, squirrel-cage induction motors.
- B. See Chapter 5, Division 01, Section 017700.1.1.B.1.i Closeout Procedures - Project Record Documents for equipment list requirements for all equipment provided in this section.

### **1.2 GENERAL**

- A. Manufacturers:
  - 1. ABB.
  - 2. Schneider Electric/Square D
  - 3. Yaskawa.
  - 4. Substitutions are not allowed.
- B. All variable frequency drives for a particular project shall be provided by the Electrical Contractor and shall be of a single manufacturer.
- C. Integral bypass switches that allow operation of the motor via line power in the event of VFD failure shall be provided on drives that are serving equipment without a standby only.
- D. Hand-off-auto switches shall only be provided on drives that are not controlled by the Building Automation System (BAS).
- E. When controlled by the Building Automation System (BAS), the following minimum points shall be provided:
  - 1. Enable (DO).
  - 2. Speed (AO).
  - 3. Current/Load (AI).
  - 4. Fault (DI).
- F. All motors associated with variable frequency motor controllers shall be outfitted with:
  - 1. Listed grounding rings, attached to their bearings, if of 5 hp or less.
  - 2. Ceramic bearings, if greater than 5 hp.

END OF SECTION 26 2923