

SECTION 26 29 36

LOW-VOLTAGE MANUAL MOTOR STARTERS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
1. CONTRACTOR shall provide all labor, materials, equipment, and incidentals as shown, specified, and required to furnish and install low-voltage manual motor starters.
 2. Provide testing, troubleshooting and startup for the furnished equipment.
- B. Related Sections:
1. Section 26 05 05, General Provisions for Electrical Systems.
 2. Section 26 05 53, Identification for Electrical Systems.

1.2 REFERENCES

- A. Standards referenced in this Section are:
1. NEMA ICS 2-110, General Standards for Manual and Magnetic Controllers.
 2. UL 508, Industrial Control Equipment

1.3 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with the following:
1. NEC Article 430, Motors, Motor Circuits, and Controllers.

1.4 SUBMITTALS

- A. Action Submittals: Submit the following:
1. Shop Drawings:
 - a. Listing of low-voltage manual motor starters to be furnished, with identification of location of each, NEMA enclosure type, and equipment to be controlled.
 2. Product Data:
 - a. Manufacturer's technical information for low-voltage manual motor starters proposed.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Provide products of one of the following:
1. Eaton / Cutler-Hammer.

2. General Electric Company.
3. Allen Bradley Company.
4. Square-D.
5. ABB.

2.2 MATERIALS

- A. Low-Voltage Manual Motor Starters:
 1. Type: Toggle-operated, horsepower-rated, with thermal overload protection.
 - a. Where shown or indicated on the Drawings, provide manual motor starters rated 600-volt, three-pole, 20-amp without overload protection for use as disconnects.
 2. Provide starters rated for 600-volt, three-pole; 240-volt, two-pole; or 120-volt, single-pole with amperage and horsepower rating as required for load to be controlled.
 3. Enclosure: As required for area classifications specified in Section 26 05 05, General Provisions for Electrical Systems.
 4. Identification: Identify starters in accordance with Section 26 05 53, Identification for Electrical Systems. Identify per the equipment controlled.
 5. Starter shall comply with NEMA ICS 2-110 and UL 508.
 6. Assembled unit shall have a fault current rating equal to the upstream power source equipment.

PART 3 – EXECUTION

3.1 INSPECTION

- A. Examine conditions under which Work will be installed and notify ENGINEER in writing of conditions detrimental to proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions are corrected.

3.2 INSTALLATION

- A. Install equipment so that sufficient access and working space is provided for ready and safe operation and maintenance.
- B. Securely fasten equipment to walls or other surfaces on which equipment is to be mounted. Provide suitable 1/4-inch spacers to so that enclosure is not installed directly against walls. Provide independent supports where no wall or surface capable of supporting equipment exists.
- C. Install in conformance with Laws and Regulations, the Contract Documents, and manufacturer recommendations.

+ + END OF SECTION + +