

SECTION 26 28 16.33

DISCONNECT SWITCHES

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 disconnect switches.
- B. Related Sections:
 - 1. Section 26 05 05, General Provisions for Electrical Systems.
 - 2. Section 26 05 53, Identification for Electrical Systems.
 - 3. Section 26 27 26.23, Snap Switches.

1.2 REFERENCES

- A. Standards referenced in this Section are:
 - 1. UL 98, Enclosed and Dead-Front Switches.
 - 2. NEMA KS 1, Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
 - 3. NEMA 250, Enclosures for Electrical Equipment (1000 Volts Maximum).

1.3 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. NEC Article 404, Switches.
 - 2. Disconnect switches shall bear the UL label.

1.4 SUBMITTALS

- A. Action Submittals: Submit the following:
 - 1. Shop Drawings:
 - a. Listing of each switch to be furnished, including location, rating, and NEMA enclosure type for each.
 - 2. Product Data:
 - a. Manufacturer's technical information for disconnect switches proposed for use.
- B. Maintenance Material Submittals: Submit the following:
 - 1. Extra Stock Materials:
 - a. Furnish one set of spare fuses for each fused disconnect switch to be installed.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Provide products of one of the following:
1. Square-D Company.
 2. Eaton / Cutler-Hammer.
 3. General Electric Company.
 4. Siemens.

2.2 MATERIALS

- A. Service Disconnect Switches:
1. Type: Fused, heavy-duty, single throw, quick-make, quick-break mechanism, visible blades in “OFF” position and safety handle.
 2. Rating: Voltage, current and short circuit ratings and number of poles as shown or indicated on the Drawings. Switch shall bear UL label indicating suitability for use as service equipment and shall comply with UL 98, NEMA KS 1, and NEMA 250.
 3. Provide auxiliary dry contacts to indicate switch position where shown on the Drawings.
- B. Single Throw, Circuit Disconnect Switches:
1. Type: Fused, horsepower rated, heavy-duty, single throw, quick-make, quick-break mechanism, visible blades in the "OFF" position and safety handle.
 2. Rating: Voltage and current ratings and number of poles as required for motor or equipment circuits being disconnected. Switches shall bear a UL label and shall comply with the requirements of UL 98, NEMA KS 1 and NEMA 250.
 3. Provide auxiliary dry contacts to indicate switch position.
 4. For HVAC equipment, provide fused disconnect switches with fuse rating as recommended by the equipment manufacturer.
 4. For all non-HVAC equipment disconnect switches, provide fused disconnects with Class J type fuses.
- C. Double Throw Safety Switches:
1. Type: Unfused, double throw with center “OFF” position, quick-make, quick-break mechanism, visible blades in the “OFF” position, and safety handle.
 2. Rating: Voltage and current ratings and number of poles as required for circuits being disconnected. Switches shall bear UL label and shall comply with UL 98, NEMA KS 1, and NEMA 250.
 3. Provide auxiliary dry contacts to indicate switch position where shown on the Drawings.
- D. Disconnect Switches for 120-volt, Single-phase Circuits:

1. Refer to Section 26 27 26.23, Snap Switches.
- E. Enclosures: NEMA rating shall be as required for area classifications specified in Section 26 05 05, General Provisions for Electrical Systems.
- F. Identification:
1. Identify enclosures in accordance with Section 26 05 53, Identification for Electrical Systems.
 2. Provide nameplate to identify the equipment served by disconnect switch and associated source of power.

PART 3 – EXECUTION

3.1 INSPECTION

- A. Examine conditions under which the 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 structural supports on which they are mounted. Provide independent stainless steel supports where no wall or other structural surface exists. Mount disconnect enclosures at a height not exceeding six feet.
- C. Provide suitable 1/4-inch spacers to prevent mounting enclosure directly against walls.

++ END OF SECTION ++