

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes separately mounted switches and circuit breakers.
- B. Provide all disconnects required by code for equipment furnished under this and other Divisions of these specifications unless disconnects are integral with equipment and acceptable to the authority having jurisdiction.

1.2 REFERENCES

- A. National Electrical Manufacturers Association (NEMA)
- B. Underwriters Laboratories (UL)

1.3 SUBMITTALS

- A. Make submittals in accordance with Section 26 05 00 - Common Work Results For Electrical. Submit product data for disconnect switches, fused disconnect switches, enclosed circuit breakers and accessories specified in this Section.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products by one of the following (same manufacturer for all products):
 - 1. Eaton Corporation - Cutler-Hammer
 - 2. General Electric
 - 3. Siemens
 - 4. Square D

2.2 DISCONNECT SWITCHES

- A. **NON-FUSED:** Heavy duty, quick make, quick break, single throw, horsepower rated with poles to open all ungrounded conductors. AIC rating same as upstream protective device with 10,000 AIC minimum. NEMA KS1. Toggle switches with padlocking provisions acceptable for circuits rated 20 amps or less.
- B. **FUSED:** As specified above with addition of fuse clips to accept only Class R fuses. Service entrance labeled for service disconnect switches.
- C. **OPERATING HANDLE:** Lockable in off position. Interlocked with cover to prevent opening when switch is closed. (Interlock to include defeating mechanism).

2.3 ENCLOSED CIRCUIT BREAKERS

- A. Enclosed, Molded-Case Circuit Breaker: NEMA AB 1, with lockable handle.

- B. Characteristics: Frame size, trip rating, number of poles, and auxiliary devices as indicated and interrupting rating to meet available fault current.
- C. Application Listing: Appropriate for application, including switching fluorescent lighting loads or heating, air-conditioning, and refrigerating equipment.
- D. Manufacture same as Section 262416 Panelboards.
- E. Circuit Breakers, 200 A and Larger: Trip units interchangeable within frame size.
- F. Circuit Breakers, 400A and Larger: Field-adjustable, short time and continuous-current settings.
- G. Current-Limiting Trips: Where indicated, let-through ratings less than NEMA FU 1, Class RK-5.
- H. Molded Case Switch: Where indicated, molded case circuit breaker without trip units.
- I. Accessories: Provide shunt trip, under voltage and other accessories where indicated.

2.4 ENCLOSURE

- A. NEMA AB 1, Type 1, unless otherwise specified or required to meet environmental conditions of installed location.
- B. Outdoor Locations: Type 3R.
- C. Kitchen Areas: Type 4X, stainless steel.
- D. Other Wet or Damp Indoor Locations: Type 4.
- E. Provide flush mounted enclosures for circuit breakers where indicated on the drawings.

2.5 NAMEPLATES

- A. Provide nameplates per Section 26 05 53 - Identification For Electrical Systems.
- B. Include the following information: Load name, voltage and phase and fuse size and type (when applicable).

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install disconnect switches and enclosed circuit breakers level and plumb according to manufacturer's written instructions.
- B. Securely mount adjacent to equipment on wall or acceptable mounting frame. Disconnect switches shall be mounted independent from the equipment they serve. Disconnects supported only by raceway are not acceptable.

- C. Wiring space within Disconnects, Fused Switches or Enclosed Circuit Breakers shall not be used for splices.
- D. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. Where manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

3.2 CLEANING

- A. After completing system installation, including outlet fittings and devices, inspect exposed finish. Remove burrs, dirt, and construction debris and repair damaged finish including chips, scratches, and abrasions.

END OF SECTION