

SECTION 262816.11 – DISCONNECT SWITCHES

PART 1 - GENERAL

1.1 SCOPE

- A. Provide all electrical equipment disconnects shown on the Drawings and specified, except where the disconnect is furnished in another Division of the Specifications.

PART 2 - PRODUCTS

2.1 DISCONNECTS

- A. Type: Fusible or non-fusible as noted on the Drawing.
- B. Voltage: 600 volts, horsepower rated at 480 volts. 250 volt rated switches, with 230 volt horsepower rating, may be provided where indicated on the Drawings.
- C. Current Rating: Amperes as noted on the Drawings, or as required for actual equipment installed. Capable of interrupting rated full load current 1,000 operations.
- D. Mechanical
 - 1. 3-pole heavy duty; quick-make quick-break.
 - 2. Visible blade; plated copper current carrying parts.
 - 3. Lugs, UL listed for 60 degrees C, aluminum or copper wires.
 - 4. Operating handle part of box, not on the cover. Position indication of ON or OFF.
 - 5. Provision for padlocking in OFF position with 3 padlocks.
 - 6. Cover interlock to prevent opening of door with switch ON, or closing of switch with door open. Screwdriver interlock defeater.
- E. Enclosure: NEMA-1 unless otherwise indicated; or suitable for the environment.
- F. Fuses: Unless otherwise indicated, fuses shall be dual element time delay, Class RK-5. Interrupting rating 200,000 amperes symmetrical.

2.2 CIRCUIT BREAKERS – NON-AUTOMATIC

- A. General
 - 1. For disconnects indicated larger than 200 amperes, or for motors larger than 60 horsepower, provide 3-pole non-automatic molded case (circuit breaker) switches.
 - 2. Enclosure and operating same as for automatic circuit breaker.
 - 3. Provision for padlocking in OFF position with 3 padlocks.
 - 4. Cover interlock to prevent opening of door with switch ON, or closing of switch with door open. Screwdriver interlock defeater.

B. Ratings

1. Voltage: 600 volts, 60 Hz, 3 phase.
2. Current: as indicated on Drawings or 125% of equipment full load amperes.
3. Interrupting Rating: 14,000 amperes symmetrical at 480 volts.

2.3 CIRCUIT BREAKERS – AUTOMATIC

- A. Type: Molded case, with thermal and magnetic trips.
- B. Thermal Trips: Bi-metal, inverse time curve. Current as noted on the Drawings.
- C. Magnetic Trips: Approximately ten times thermal rating.
- D. Interrupting Capacity: Min. 14,000 amperes at 480 volts, or as indicated.
- E. Operating Handle:
1. External on box or through cover. Three distinct positions; ON, TRIPPED, OFF.
 2. Cover interlock to prevent opening of door with switch ON, or closing of switch with door open. Screwdriver interlock defeater.
 3. Provision for padlocking in OFF position with 3 padlocks.
- F. Enclosure: NEMA-1 unless otherwise indicated; or suitable for the environment.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Locate as indicated on the Drawings, or as convenient, comply with the NEC.
- B. Bolt units rigidly to structure with appropriate brackets, or threaded holes.
- C. On Masonry or Concrete Walls, install insulating spacers between unit and wall.

3.2 SPARE FUSES

- A. Furnish to Owner at the completion of the project, a quantity of fuses of each size and type used equal to 10% of the number installed, but not less than three of each size.

END OF SECTION 262816.11