MOTOR AND CIRCUIT DISCONNECTS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Extent of motor and circuit disconnect switch work is indicated by drawings, schedules, and code requirements.

B. Types of motor and circuit disconnect switches in this section including the following:

   Equipment disconnects.
   Appliance disconnects.
   Motor-circuit disconnects.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS:

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:

   General Electric Co.
   Siemens
   Square D Company
   Cutler-Hammer

2.02 FABRICATED SWITCHES:

A. General-Duty Disconnect Switches: Provide surface-mounted, general-duty type, sheet steel enclosed switches, of types, sizes, and electrical characteristics indicated; rated 240 volts, 200 amperes and below, 60 hertz, with 3-blades, 3-poles; incorporating spring assisted, quick-make, quick-break switches which are so constructed that switch blades are visible in OFF position with door open. Equip with operating handle which is integral part of enclosure base and whose position is easily recognizable, and is capable of being padlocked in OFF position. Construct current carrying parts of high-conductivity copper, with silver-tungsten
type switch contacts, and stamped enclosure knockouts. Provide type enclosure suitable for the application. Use NEMA 3R for all outdoor applications.

B. Heavy-Duty Safety Switches: Provide surface-mounted, heavy-duty type, sheet steel enclosed safety switches, of types, sizes and electrical characteristics indicated; fusible type, rated 600 volts, 400 amperes and below, 60 hertz, 3-blades, 4-poles, solid neutral; incorporating quick-make, quick-break type switches; so construct that switch blades are visible in OFF position with door open. Equip with operating handle which is integral part of enclosure base and whose position is easily recognizable, and is padlockable in OFF position; construct current carrying parts of high-conductivity copper, with silver-tungsten type switch contacts, and positive pressure type reinforced fuse clips. Provide NEMA type 3R enclosure for outdoor.

C. Fuses: Provide fuses for safety switches, as recommended by switch manufacturer, of classes, types, and ratings needed to fulfill electrical requirements for service indicated. Provide fuses to match equipment label requirements when fuse information is furnished as part of the equipment label.

D. Provide electrical interlock kits for all disconnects serving variable frequency drives.

PART 3 - EXECUTION

3.01 INSTALLATION OF MOTOR AND CIRCUIT DISCONNECT SWITCHES:

A. Install motor and circuit disconnect switches where required by code, complying with manufacturer's written instructions, applicable requirements of NEC, NEMA, and NECA's "Standard of Installation", and in accordance with recognized industry practices to ensure that products fulfill requirements.

B. Coordinate motor and circuit disconnect switch installation work with electrical raceway and cable work, as necessary for proper interface.

C. Install disconnect switches used with motor-driven appliances, and motors and controllers within sight of controller position unless otherwise indicated.

D. Mount disconnect switches securely. Use stainless steel or silicon bronze fasteners for mounting outdoor switches.
E. Where building walls or equipment frames do not provide suitable mounting surface, provide galvanized unistrut frames or racks which will securely support the disconnect switch. Indoor frames may be painted unistrut frames.

END OF SECTION 262870