PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Extent of overcurrent protective device work is indicated by drawings, schedules, and code requirements.

B. Types of overcurrent protective devices in this section include the following:
   
   Circuit breakers.
   Fuses.

C. Provide overcurrent protection for all electrical work.

D. Maintenance Stock, Fuses: For types and ratings required, furnish additional fuses, amounting to one unit for every 5 installed units, but not less than one unit of each.

PART - 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:

1. Circuit Breakers:
   
   General Electric Co.
   Siemens
   Square D Co.
   Cutler-Hammer

2. Fuses:

   Bussmann Mfg Co.
   Littelfuse Co.
2.02 CIRCUIT BREAKERS:

A. General: Except as otherwise indicated, provide circuit breakers and ancillary components, of types, sizes, ratings and electrical characteristics indicated or required, which comply with manufacturer's standard design, materials, components, and construction in accordance with published product information, and as required for a complete installation.

B. Molded-Case Circuit Breakers: Provide factory-assembled, molded-case circuit breakers amperes rated as indicated on the drawings, 600-Volts for 480-Volt system and 240-Volts for 208-Volt system, 60 HZ, 3-pole or single-pole as indicated with RMS symmetrical interrupting ratings as required by the application and location within the distribution system. Provide breakers with permanent thermal and instantaneous magnetic trips in each pole, ampere ratings as indicated. Construct with overcenter, trip-free, toggle type operating mechanisms with quick-make, quick-break action and positive handle indication. Provide push-to-trip button on cover for mechanically tripping circuit breakers. Construct breakers for mounting and operating in any physical position and in an ambient temperature of 40 C. Provide with mechanical screw type removable connector lugs, AL/CU rated.

2.03 FUSES:

A. General: Except as otherwise indicated, provide fuses of types, sizes and ratings and electrical characteristics indicated or required, which comply with manufacturer's standard design, materials, and construction in accordance with published product information, and with industry standards and configurations.

B. Class L Fuses: Provide NEMA Class L fuses in current ratings indicated or required, for service entrances and main and feeder circuits.

C. Class J (K-5) Fuses: Provide NEMA Class J (K-5), dual-element types, with time delay of 10 seconds at 500% of rating, for use with switches.

D. Where equipment nameplate requires a specific fuse, the required fuse shall be furnished.

E. Provide indicator type fuses where such fuses are available.
3.01 INSTALLATION OF OVERCURRENT PROTECTIVE DEVICES:

A. Install overcurrent protective devices as indicated or required, in accordance with the manufacturer's written instructions and with recognized industry practices to ensure that protective devices comply with requirements. Comply with NEC and NEMA standards for installation and application of overcurrent protective devices.

B. Coordinate with other work, including electrical wiring work, as necessary to interface installation of overcurrent protective devices with other work.

C. Fasten circuit breakers without mechanical stresses, twisting or misalignment being exerted by clamps, supports, or cables.

D. Set field-adjustable circuit breakers for trip settings as indicated, subsequent to installation of devices.

E. Install fuses, if any, in fused circuit breakers and fused disconnect switches.

3.02 ADJUST AND CLEAN:

A. Inspect circuit-breaker operating mechanisms for malfunctioning and, where necessary, adjust units for free mechanical movement.

3.03 FIELD QUALITY CONTROL:

A. Prior to energization of overcurrent protective devices, test devices for continuity of circuitry and for short-circuits. Correct malfunctioning units, and then demonstrate compliance with requirements.

END OF SECTION 262810