

## **SECTION 262813 - FUSES**

### **PART 1 - GENERAL**

#### **1.1 SUBMITTAL REQUIREMENTS**

- A. Product Data
  - 1. For each type include fuse characteristics, trip curves, ratings, size, ambient temperature adjustment information, etc.

#### **1.2 EXTRA MATERIALS**

- A. Fuses: Furnish fuses equal to 10% of project quantity not exceeding (10) for each fuse size and type. Furnish no fewer than (2) for single phase applications and (3) for three phase applications.

### **PART 2 - PRODUCTS**

#### **2.1 MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following available manufacturers offering products that may be incorporated into the Work:
  - 1. Cooper Bussmann, Inc.
  - 2. Edison Fuse, Inc.
  - 3. Mersen, Inc.
  - 4. Littelfuse, Inc.

#### **2.2 GENERAL REQUIREMENTS**

- A. Characteristics:
  - 1. 50 through 60 Hz., with 200,000 RMS symmetrical interrupting current rating.
  - 2. Voltage: Rate based on voltage of protected feeders, circuits and loads.
  - 3. Provide rejection type fuses for fuses 1 ampere through 600 amperes.
  - 4. Provide Hi-Cap, bolt type fuses for fuses 601 amperes through 6000 amperes.
  - 5. Cartridge Fuses: NEMA FU 1, nonrenewable cartridge fuses with voltage ratings consistent with circuit voltages.
  - 6. Provide each fuse with clear factory markings indicating classification, characteristics, ampere ratings, voltage ratings, etc.

**PART 3 - EXECUTION****3.1 FUSE APPLICATIONS**

- A. For protecting general duty motors: Provide UL Class RK-5 Current-Limiting/Time-Delay fuses. Provide fuses that are time-delay, dual-element type (with pure silver links), equal to Bussman #LPS-RK5 (600V) or Bussman #LPN-RK-5 (250V) as applicable. Provide fuses that are rated 60 Hz, with 200,000 RMS symmetrical interrupting current rating.

**3.2 INSTALLATION**

- A. Examine holders to receive fuses for compliance with installation tolerances and other conditions affecting performance, such as rejection features. Examine utilization equipment nameplates and installation instructions. Install fuses of sizes and with characteristics appropriate for each piece of equipment. Evaluate ambient temperatures to determine if fuse rating adjustment factors must be applied to fuse ratings. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Install fuses in fusible devices. Arrange fuses so rating information is readable without removing fuse. Provide fuses as required to render related electrical, and electrically operated, equipment fully operational. Do not ship fuses installed in switches. Do not install fuses in equipment until wiring and equipment is ready to be energized, and until fuse sizes have been field-coordinated with wiring and equipment being protected. Field verify recommended fuse size and type from respective equipment installer and/or manufacturer prior to installing fuses for protection of specific equipment, motors, etc. Contact Design Professional if a conflict in fuse size or type arises between manufacturer's recommendations and above specifications.
- C. Install labels complying with requirements for identification specified in Section 260553 "Identification for Electrical Systems" and indicating fuse replacement information on inside door of each fused switch and adjacent to each fuse block, socket, and holder.

**END OF SECTION 262813**