SECTION 26 28 13 - FUSES

PART I - GENERAL

1.1 SUBMITTALS

A. The electrical contractor shall furnish and install a complete set of fuses for all fusible equipment on the job as specified by the electrical drawings. Final tests and inspections shall be made prior to energizing the equipment.

B. All fuses shall be by Bussmann, Mersen, or Littlefuse. No exception.

PART 2 - PRODUCTS

2.1 Fuses shall be as follows:

A. Mains, Feeders and Branch Circuits

1. Circuits 601 to 6000 amperes shall be protected by current-limiting Class L fuses. Fuses shall be time-delay and shall hold 500% of rated current for a minimum of 4 seconds, clear 20 times rated current in .01 second or less and be UL Listed and CSA Certified with an interrupting rating of 200,000 amperes RMS symmetrical. Mersen A4BQ, Bussmann KRP-C, or Littlefuse KLPC series.

2. Circuits 600 amperes or less shall be protected by current-limiting Class RK1 time-delay, or Class J time-delay fuses. Fuses shall hold 500% of rated current for a minimum of 10 seconds (30A, 250V Class RK1 case size shall be a minimum of 8 seconds) and shall be UL Listed and CSA Certified with an interrupting rating of 200,000 amperes RMS symmetrical. Mersen A2D/A6D or AJT, Bussmann LPN/LPS or LPJ, Littlefuse LLNRK/LLSRK or JTD

B. Motor and Motor Controller Protection

1. All individual motor circuits shall be protected by Class RK1, Class J or Class L time-delay fuses as follows:

a. Circuits up to 480A: Class RK1, or Class J

b. Circuits over 480A: Class L

2. Fuses shall be chosen in accordance with motor control manufacturers' published recommendations, based on Type 2 test results. As a general rule, fuses shall not exceed 125% of the value in NEC Table 430.248 or 430.250

C. Variable Frequency Drive Protection

1. All Variable Frequency Drives shall have their inputs protected by high-speed fuses, such as Bussmann FWH series, or approved equal, or other fuse model as required by the manufacturer. Always consult manufacturer instructions to ensure correct protection.
Spares

2.2 Spare Fuses

A. Spare fuses amounting three of each type and rating shall be supplied by the electrical contractor. These shall be turned over to the owner upon project completion.

B. Fuses shall be contained and cataloged within the appropriate number of spare fuse cabinets (no less than one). Spare fuse cabinets shall be equipped with a key lock handle, be dedicated for storage of spare fuses and shall be by Mersen, Bussmann, or Littlefuse.

PART 3 - EXECUTION

3.1 INSTALLATION – GENERAL

A. Fuses shall not be installed until equipment is to be energized. All fuses shall be of the same manufacturer to assure selective coordination.

B. Final tests and inspections shall be made prior to energizing the equipment. This shall include a thorough cleaning, tightening, and review of all electrical connections and inspection of all grounding conductors.

3.2 SUBMITTALS

A. As-built drawings shall be submitted to the engineer after completion of the job.

END OF SECTION 26 28 13

This section of the *U of I Facilities Standards* establishes minimum requirements only.
It should not be used as a complete specification.