

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Fuses.
- B. Related Sections:
 - 1. Section 26 28 19 - Enclosed Switches.

1.02 REFERENCE STANDARDS

- A. National Electrical Manufacturers Association:
 - 1. NEMA FU 1 - Low Voltage Cartridge Fuses.
- B. Underwriter's Laboratories, Inc.
 - 1. UL 248-8 - Low-Voltage Fuses - Part 8: Class J Fuses.
 - 2. UL 248-10 - Low-Voltage Fuses - Part 10: Class L Fuses.
 - 3. UL 248-12 - Low-Voltage Fuses - Part 12: Class R Fuses.
 - 4. UL 248-14 - Low-Voltage Fuses - Part 14: Supplemental Fuses.

1.03 SUBMITTALS

- A. Division 01 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit data sheets showing electrical characteristics, including time-current curves.

1.04 CLOSEOUT SUBMITTALS

- A. Division 01 - Execution and Closeout Requirements: Closeout procedures.
- B. Project Record Documents: Record actual sizes, ratings, and locations of fuses.

1.05 MAINTENANCE MATERIALS

- A. Division 01 - Execution and Closeout Requirements: Requirements for maintenance materials
- B. Extra Materials:
 - 1. Furnish 10% but not less than six spare fuses of each Class, size, and rating installed.

1.06 QUALITY ASSURANCE

A. Qualifications:

1. Manufacturer: Company specializing in manufacturing products specified in this section with minimum ten years documented experience.

PART 2 - PRODUCTS

2.01 FUSES - GENERAL

A. Subject to compliance with the requirements of the Specification, manufacturers offering products that may be incorporated into the project include, but are not limited to, the following:

1. Cooper Industries - Bussmann.
2. Ferraz-Shawmut.
3. Littelfuse.
4. Or Approved Equal.

B. Dimensions and Performance: NEMA FU 1, Class as specified or as indicated on Drawings.

C. All fuses shall have an interrupting rating of 200,000 amperes RMS Symmetrical.

D. All fuses shall be UL Listed.

E. All fuses utilized on the project shall be products of one manufacturer.

F. Voltage: Rating suitable for circuit phase-to-phase voltage.

G. Substitution Limitations:

1. Division 01 - Product Requirements: Requirements for substitutions for other manufacturers and products.

2.02 CLASS RK1 (TIME DELAY) FUSES

A. Manufacturers:

1. Bussmann Type LPN-RK (250V) or Type LPS-RK (600V).
2. Ferraz-Shawmut A2D (250V) or A6D (600V).
3. Littelfuse Type LLN-RK (250V) or Type LLS-RK (600V).

B. Description: Dual-Element, time-delay, current limiting, rejection type.

2.03 CLASS J (TIME DELAY) FUSES

A. Manufacturers:

1. Bussmann Type LPJ (600V).

2. Littelfuse Type JTD (600V).

B. Description: Dual element, time-delay fuse; current limiting.

2.04 CLASS L (TIME DELAY) FUSES

A. Manufacturers:

1. Bussmann Type KRP-C (600V).

2. Littelfuse Type KLP-C (600V).

3. Ferraz-Shawmut A4BQ (600V).

B. Description: Time-delay (minimum 4 sec at 500% of rating), current limiting, machined end bells with O-ring inlays, silver plated terminals.

2.05 CLASS CC (TIME DELAY) FUSES

A. Manufacturers:

1. Bussmann Type LP-CC (600V).

2. Ferraz-Shawmut ATDR (600V).

3. Littelfuse Type KLDR (600V).

B. Description: Time-delay fuse; rejection type.

2.06 SPARE FUSE CABINET

A. Manufacturers:

1. Bussmann.

2. Ferraz-Shawmut.

3. Littelfuse.

4. Or Approved Equal.

B. Product Description: Wall-mounted sheet metal cabinet with shelves, suitably sized to store spare fuses and fuse pullers specified.

C. Doors: Hinged with hasp for Owner's padlock.

D. Finish: Manufacturer's standard baked enamel finish.

E. Furnish two fuse pullers in each spare fuse cabinet.

2.07 FUSE PERFORMANCE REQUIREMENTS

A. Motor Load Feeder Switches: UL Class RK1 (time-delay).

B. General Purpose Branch Circuits: UL Class RK1 (time-delay).

- C. Motor Branch Circuits: Class RK1 (time delay).
- D. Lighting Branch Circuits: UL Class CC (time delay).
- E. Motor Control Transformers: UL Class CC (time-delay).

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install fuse with label oriented so manufacturer, type, and size are easily read.
- B. Promptly replace all fuses cleared during construction for whatever cause.

3.02 FUSE TYPE

- A. The type of fuses required for each application, are given in the Specification Sections where equipment requiring fuses are specified.
- B. If the fuse type is not identified, provide UL Class RK-1 fuses.

3.03 SPARE FUSE CABINET

- A. Install spare fuse cabinet in the Electric Distribution Equipment Room or as directed.

END OF SECTION