Section 16480

Safety Switches

Part One: General

1.1 General Requirements

1.1.1 Provisions

The provisions of Section 16000, General Requirements for Electrical Work apply to the work of this section.

1.2 Applicable Codes and Standards

1.2.1 Products

Products shall comply with the following codes and standards and shall be UL-listed and labeled:

NEMA KS-1	Enclosed Switches
UL 98	Enclosed and Deadfront Switches

1.3 Submittals Required

1.3.1 Data Sheets

Manufacturer's product data sheets.

1.4 Manufacturers

Subject to compliance with the specification requirements:

- General Electric
- Square D
- Siemens
- Cutler Hammer

Part Two: Products

2.1 General

2.1.1 Description

Safety switches shall be 240 VAC NEMA heavy duty, horsepower rated visible blade type. Switches shall be non-fused or fused as indicated on the drawings. Lugs shall be front removable and UL listed for copper conductors. All current carrying parts shall be plated to resist corrosion.

2.1.2 Switch Operating Mechanism

The switch operating mechanism shall be spring activated quick make - quick break, such that during the normal operation of the switch, the operation of the contacts shall not be capable of being restrained by the operating handle after the closing or opening operation of the contacts has been started.

2.1.3 External Operating Handle

The external operating handle shall be an integral part of the box and not the cover. The operating handle shall also indicate the switch position, ON in the up position, OFF in the down position and be capable of being padlocked in the OFF position. An interlock shall be provided to prevent opening the cover when the switch is ON and prevent closing the switch contacts when the cover is opened. This interlock mechanism shall be provided with an externally operated override.

2.1.4 Arc Suppressors and Line Terminal Shields

Switches shall be provided with arc suppressors and line terminal shields. Arc suppressors shall be removable if necessary to facilitate access to line side lugs.

2.1.5 Number of Switched Poles

Single speed motors shall be provided with three pole switches. Two speed motors shall be provided with six pole switches.

2.1.6 Ground Kit

Switches shall be provided with a factory supplied ground kit.

2.1.7 Fused Switches

Fused switches shall be provided with class H or K fuses.

2.1.8 Short Circuit Rating

The UL Listed short circuit current rating of the switches shall be 10KAIC when used with Class H or K fuses.

2.1.9 Enclosures

Safety switches installed indoors shall be provided with NEMA 1 enclosures. Safety switches installed outdoors or in wet areas shall be provided with NEMA 3R enclosures.

Part Three: Execution

3.1 General

3.1.1 Installation

Safety Switches shall be installed in accordance with manufacturer's instructions.

End of Section 16480