

# Division 262816 Enclosed Switches DESIGN GUIDE

## 1 General

### 1.1 Introduction

- A. This section applies to the following:
  - 1. Fusible Switches
  - 2. Non-Fusible Switches

### 2 Materials

### 2.1 General

- A. Manufacturers: Eaton Electrical, General Electric or Square D.
- B. Type: Safety switches shall be enclosed heavy-duty type, with externally operable handle and enclosed load-interrupter knife switch. Switch mechanism shall be quick-make quick-break type. Handle shall be lockable in the off position.
- C. Neutral Bus: A full-size insulated neutral bus shall be included in safety switches indicated with neutral.
- D. Ground Bus: A copper ground bus capable of being isolated shall be included in each safety switch.
- E. Enclosures: Indoor switches shall have minimum NEMA Type 1 general purpose enclosures. Switches installed outdoors shall have minimum NEMA Type 3R raintight enclosures.



F. For safety switches installed on the load side of variable frequency drives, provide auxiliary contacts in the safety switch for interlock.

#### 2.2 Fusible Switches

A. Fuse Clips: Fusible switches shall be equipped with rejection-type fuse clips designed to accommodate Class R current-limiting fuses.

### **3 Execution**

#### 3.1 Installation

- A. Install safety switches plumb. Anchor safety switches to structure.
- B. Mount safety switches with top of operating handle 54 inches above floor when in its highest position. In no case shall the handle be mounted more than 78 inches above the floor when in its highest position.
- C. Neatly arrange and lace conductors in safety switch enclosures.
- D. Apply adhesive tag on inside door of each fusible switch indicating fuse class and size installed.

### 3.2 Adjustment and Testing

A. Tighten connectors and terminals, including screws and bolts, in accordance with equipment manufacturer's published torque tightening values for equipment connectors. Check tightness of bolted connections using calibrated torque wrench or torque screwdriver per manufacturer's instructions. Record date and torque values and include in O&M manuals.

## 4 Appendix

### 4.1 Reserved for future.