



DESIGN REQUIREMENTS

CIRCUIT AND MOTOR DISCONNECTS

GENERAL INFORMATION

- 1.1 This section applies to circuit and motor disconnects.

DESIGN REQUIREMENTS

- 2.1 All disconnect switches will have a large engraved label permanently affixed on its exterior that clearly identifies where the switch is fed from, what it feeds, its voltage and phase designation, if it's normal or emergency and its capacity. The wording is the responsibility of the Engineer of Record.
- 2.2 Provide appropriate control wiring to VFD's from disconnect switches as required by the equipment for proper operation.
- 2.3 Disconnects serving elevators: Provide fused units with horsepower ratings suitable for the elevator motor, and a set of contacts that open when the disconnect switch is in the "OFF" position to signal the elevator controller of said status.
- 2.4 Provide disconnect switches at each load served where the main lockable starter/disconnect is not located in direct sight of the load and arrange to disconnect all phase conductors. Do not use lock-out switches that only interrupt the control circuit as the disconnecting means.
- 2.5 Provide ground lug in each disconnect switch.
- 2.6 Provide solid neutral bus in disconnect switches for 4-wire circuits.

CONSTRUCTION REQUIREMENTS

- 3.1 Provide heavy-duty, metal enclosed, externally operated fused, or unfused, safety switches, of such type and size as required to properly protect or disconnect the load for which they are intended. The operating mechanism shall be so designed that the switches may be locked in the "ON" or "OFF" positions.
- 3.2 All fusible switches will be heavy-duty type with proper fuse clips. Each fused safety switch shall be left equipped with a complete set of fuses.



DESIGN REQUIREMENTS

- 3.3 All non-fusible disconnects and double throw non-automatic switches will be heavy duty type.
- 3.4 All disconnect switches will be strategically placed where they can be easily accessed maintenance personnel without using a ladder or traversing other equipment.

REFERENCE

- 4.1 The applicable CSI Specification Section is 262818.