

GENERAL:

The scope of this document is to provide requirements for fuses, enclosed switches and circuit breakers.

DESIGN GUIDELINES:

1. Fuses
 - 1.1. Renewable fuses will not be used.
 - 1.2. As much as possible, equipment should be specified with fuse holders that will accept fuses dimensionally the same as Class H fuses.
 - 1.3. A box to store fuses will be required for fuses over 400 amps. The box shall be a metal box, designed to store fuses, mounted in a highly visible location, and labeled appropriately.
2. Enclosed Switches
 - 2.1. All Enclosed Switches shall be NEMA Type HD (Heavy Duty) quick-make, quick-break disconnect switches with dual cover interlock to prevent door opening when switch is closed. An operator override will be provided to allow the door to be opened without having to open the switch. Switch shall be padlockable in 'closed' and 'open' position and the disconnect switch shall be provided with an external indication of 'on' and 'off'.
 - 2.2. Motors and other equipment not within sight of their feeder over current protection devices will be fed from disconnect switches located at the motor or equipment.
 - 2.3. All enclosed switches shall have a durable label permanently attached to the inside of the cover describing the fuse size, type, current limiting ability and devices controlled.
 - 2.4. All enclosed switches intended for use on circuits where current limiting fuses are required will be specified with rejection clips designed to permit installation of Class R fuses only.
 - 2.5. All enclosed switches shall have a grounding bar.
 - 2.6. Enclosed switches in mechanical rooms and potential wet locations (i.e. animal rooms, greenhouses, etc.) will have NEMA 3R enclosures unless the environment or usage requires a more restrictive enclosure.
 - 2.7. Enclosed switch is required between the motor and a variable speed drive.
3. Circuit Breaker
 - 3.1. Bolt-in breakers shall be used. Plug-in breakers are not allowed. Square D I-Line and GE Spectra Series are acceptable.
 - 3.2. Two and Three pole circuit breakers shall have an internal common trip and all circuit breakers frame sizes rated 200-amp and larger shall have interchangeable trips.
 - 3.3. Only one conductor shall be connected to each circuit breaker, unless the circuit breaker is designed and Listed for multiple conductors.
 - 3.4. No piggy back breakers will be allowed.
 - 3.5. All general purpose power circuits will be a minimum of 20 amps.