

SECTION 16482 – “MOTOR CONTROL CENTERS”

- 1.0 The Motor Control Centers (MCC) shall be designed and manufactured in accordance with the applicable sections of NFPA 70 and NEMA ICS 2, UL 845, UL 508C, and ANSI Standards. MCCs shall be Class1, Type B. Provide shop drawings and as-built drawings showing all control wiring and control devices.
- 2.0 The professional is responsible for assessing the need for Motor Control Centers. Where four (4) or more motors are grouped together, a Motor Control Center shall be utilized. The Motor Control Center shall have ratings suitable for the connected load plus thirty (30) percent spare capacity and thirty (30) percent space to accommodate future starters. The motor control centers shall be located adjacent to the loads served and in a locked room.
- 3.0 Enclosure shall be suitable for the environment. NEMA 1 enclosures shall not be used – provide minimum NEMA 2 (drip-proof) rating.
- 4.0 Bus shall be silver-plated copper; ground bus shall be installed to the full length of the MCC. Bus shall be braced to suit the available fault current.
- 5.0 All 480 volt starters shall be of the drawout type with thermal magnetic circuit breaker or Magnetic Circuit Protector (MCP). Professional shall review the starter type and the affect motor starting will have on the distribution system. Utilize solid state reduced voltage starters where the in-rush current is excessive. Starters shall include all features required to perform required functions (i.e. CPT, short circuit/ground fault protection, overload protection). Starters shall include pushbuttons, lights, and 2NO and 2NC auxiliary contacts.
- 6.0 Medium voltage (4160) starters shall be reactor type utilizing vacuum contactors. Multi-function motor protective relays shall be GE/Multilin MPR type.
- 7.0 Ground MCC to power supply source ground bus via a feeder ground conductor.
- 8.0 Provide bus stabs for future additions to line-up.
- 9.0 Provide nameplates for MCC, all starters, spares and spaces.
- 10.0 Spaces shall include buses, rails, and terminal blocks.
- 11.0 Mount MCCs on 4-inch high concrete pads.

END OF SECTION