**PART 1 GENERAL**

* 1. **SECTION INCLUDES**
     1. Enclosed molded case circuit breakers.
  2. **REFERENCES**
     1. FS W-C-375 - Circuit Breakers, Molded Case, Branch Circuit and Service.
     2. NEMA AB 1 - Molded Case Circuit Breakers.
  3. **SUBMITTALS**
     1. Submit product data under provisions with Division 01.
     2. Include circuit breaker and current limiter ratings, trip current and let-through current curves, outline dimensions, and terminal lug sizes.
  4. **REGULATORY REQUIREMENTS**
     1. Use circuit breakers listed by Underwriter's Laboratories, Inc., and suitable for specific application.
  5. **EXTRA MATERIALS**
     1. Submit extra materials.
     2. Submit three of each size and type current limiter.

**PART 2 - PRODUCTS**

* 1. **MANUFACTURERS**
     1. Square D
     2. General Electric.
  2. **MOLDED CASE CIRCUIT BREAKER**
     1. Circuit Breaker: NEMA AB 1 and FS W-C-375.
     2. Service Conditions:
        1. Temperature: 115 degrees F.
  3. **CONFIGURATION**
     1. Configuration: Inverse time automatic tripping.
     2. Field-Adjustable Trip Circuit Breaker: NEMA AB 1; Provide circuit breakers with frame sizes 200 amperes and larger with mechanism for adjusting long time, short time and continuous current and short time, long time pickup current setting for automatic operation.
     3. Field-Changeable Ampere Rating Circuit Breakers: NEMA AB 1; Provide circuit breakers with frame sizes 200 amperes and larger with changeable trip units.
     4. Current Limiting Circuit Breaker: Provide circuit breaker as indicated on drawings with automatic-resetting current limiting elements in each pole. Let-through Current and Energy: Less than permitted for same size Class RK-5 fuse.
     5. Solid-State Circuit Breaker: Provide circuit breaker as indicated on drawings with electronic sensing, timing and tripping circuits for adjustable current settings; ground fault trip with integral ground fault sensing; instantaneous trip; and adjustable short time trip.
  4. **RATINGS:**
     1. Ratings: NEMA AB 1; as indicated on drawings.
  5. **TERMINAL LUGS**
     1. Size: NEMA AB 1, copper, aluminum or copper-clad aluminum, suitable for conductor size and quantity indicated on drawings.
  6. **CURRENT LIMITERS**
     1. Current Limiter: Designed for application with molded case circuit breaker.
     2. Coordinate limiter size with trip rating of circuit breaker to prevent nuisance tripping and to achieve interrupting current rating specified for circuit breaker.
     3. Provide interlocks to trip circuit breaker and to prevent closing circuit breaker when limiter compartment cover is removed or when one or more limiter is not in place or has operated.
  7. **ENCLOSURE**
     1. Enclosure: NEMA AB 1; Type 1 for dry interior locations and Type 3R for exterior or damp locations unless otherwise indicated on drawings.
     2. Fabricate enclosure from steel.
     3. Finish using manufacturer's standard enamel finish, gray color.
  8. **ACCESSORIES**
     1. Provide accessories as indicated on drawings to NEMA AB 1.
        1. Shunt Trip Device: 120 volts, AC unless otherwise indicated on drawings.
        2. Undervoltage Trip Device: 120 volts, AC unless otherwise indicated on drawings.
        3. Auxiliary Switch: 120 volts, AC. unless otherwise indicated on drawings.
        4. Alarm Switch: 120 volts, AC. unless otherwise indicated on drawings.
        5. Electrical Operator: 120 volts, AC. unless otherwise indicated on drawings.
     2. Handle Lock: Include provisions for padlocking.
     3. Provide mechanical trip device.

**PART 3 - EXECUTION**

* 1. **EXAMINATION**
     1. Verify that surfaces are ready to receive work.
     2. Verify field measurements are as shown on Drawings.
     3. Verify that required utilities are available, in proper location, and ready for use.
     4. Beginning of installation means installer accepts conditions.
  2. **INSTALLATION**
     1. Install enclosed circuit breakers where shown on Drawings, in accordance with manufacturer's instructions.
  3. **ADJUSTING**
     1. Adjust trip settings so that circuit breakers coordinate with other overcurrent protective devices in circuit.
     2. Adjust trip settings to provide adequate protection from overcurrent and fault currents.
  4. **FIELD QUALITY CONTROL**
     1. Inspect and test each circuit breaker to NEMA AB 1.
     2. Inspect visually and perform several mechanical ON-OFF operations on each circuit breaker.
     3. Verify circuit continuity on each pole in closed position.
     4. Determine that circuit breaker will trip on overcurrent condition, with tripping time to NEMA AB 1 requirements.
     5. Include description of testing and results in test report.

# END OF SECTION