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**MOULDED CASE CIRCUIT BREAKERS**

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**1. GENERAL**

**1.1 Section Includes**

- .1 Materials for moulded-case circuit breakers, circuit breakers, and ground-fault circuit-interrupters, fused circuit breakers, and accessory high-fault protectors.

**1.2 References**

- .1 Canadian Standards Association (CSA I).
  - .1 CSA-C22.2 No. 5, Moulded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures (Tri-national standard with UL 489, tenth edition, and the second edition of NMX-J-266-ANCE).

**1.3 Submittals**

- .1 Submit product data in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Include time-current characteristic curves for breakers with interrupting capacity of 22,000 A symmetrical (RMS) and over at system voltage.

**2. PRODUCTS**

**2.1 Breakers General**

- .1 Moulded-case circuit breakers, and Ground-fault circuit-interrupters: to CSA C22.2 No. 5
- .2 Bolt-on moulded case circuit breaker: quick- make, quick-break type, for manual and automatic operation with temperature compensation for 40 degrees C ambient.
- .3 Common-trip breakers: with single handle for multi-pole applications.
- .4 Magnetic instantaneous trip elements in circuit breakers to operate only when value of current reaches setting.
  - .1 Trip settings on breakers with adjustable trips to range from 3-8 times current rating.
- .5 Circuit breakers with interchangeable trips as indicated.
- .6 Circuit breakers to have minimum symmetrical RMS interrupting capacity rating.

**2.2 Thermal Magnetic Breakers**

- .1 Moulded case circuit breaker to operate automatically by means of thermal and magnetic tripping devices to provide inverse time current tripping and instantaneous tripping for short circuit protection.

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**2.3 Magnetic Breakers**

- .1 Moulded case circuit breaker to operate automatically by means of magnetic tripping devices to provide instantaneous tripping for short circuit protection. Not for use with VFD's.

**2.4 Solid State Trip Breakers**

- .1 Moulded case circuit breaker to operate by means of solid-state trip unit with associated current monitors and self-powered shunt trip to provide inverse time current trip under overload condition, and short time tripping for ground fault short circuit protection.

**2.5 Optional Features**

- .1 Include:
  - .1 Shunt trip.
  - .2 Auxiliary switch.
  - .3 Motor-operated mechanism c/w time delay unit.
  - .4 Under-voltage release.
  - .5 On-off locking device.
  - .6 Handle mechanism.

**3. EXECUTION**

**3.1 Installation**

- .1 Install circuit breakers as indicated.

**END OF SECTION**