

**MOULDED CASE CIRCUIT BREAKERS****PART 1**      **GENERAL****1.1**      **RELATED SECTIONS**

- .1      Section 01 33 00 - Submittal Procedures.
- .2      Section 26 05 00 - Common Work Results – Electrical.

**1.2**      **SUBMITTALS**

- .1      Include time-current characteristic curves for breakers with ampacity of 600 A and over or with interrupting capacity of 22,000 A symmetrical (rms) and over at system voltage.
- .2      Prior to any installation of circuit breakers in either a new or existing installation, Contractor must submit three (3) copies of a certificate of origin, from the manufacturer, duly signed by the factory and the local manufacturer's representative, certifying that all circuit breakers come from this manufacturer, they are new and they meet standards and regulations. These certificates must be submitted to the Departmental Representative for approval.
- .3      A delay in the production of the certificate of origin won't justify any extension of the contract and additional compensation.
- .4      Any work of manufacturing, assembly or installation should begin only after acceptance of the certificate of origin by Departmental Representative. Unless complying with this requirement, Departmental Representative reserves the right to mandate the manufacturer listed on circuit breakers to authenticate all new circuit breakers under the contract, and that, to Contractor's expense.
- .5      In general, the certificate of origin must contain:
  - .1      The name and address of the manufacturer and the person responsible for authentication. The responsible person must sign and date the certificate;
  - .2      The name and address of the licensed dealer and the person of the distributor responsible for the Contractor's account.
  - .3      The name and address of the Contractor and the person responsible for the project.
  - .4      The name and address of the local manufacturer's representative. The local representative must sign and date the certificate.
  - .5      The name and address of the building where circuit breakers will be installed:
    - .1      Project title.
    - .2      End user's reference number.
    - .3      The list of circuit breakers.

**MOULDED CASE CIRCUIT BREAKERS****PART 2****PRODUCTS****2.1 BREAKERS GENERAL**

- .1 Bolt-on moulded case circuit breaker: quick- make, quick-break type, for manual and automatic operation with temperature compensation for 40°C ambient.
- .2 Common-trip breakers: with single handle for multi-pole applications.
- .3 Magnetic instantaneous trip elements in circuit breakers to operate only when value of current reaches setting. Trip settings on breakers with adjustable trips to range from 3-8 times current rating.
- .4 Circuit breakers with interchangeable trips as indicated.
- .5 Circuit breakers to have minimum symmetrical rms interrupting capacity rating as existing. Coordinate on site.

**2.2 THERMAL MAGNETIC BREAKERS DESIGN A**

- .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.

**PART 3****EXECUTION****3.1 INSTALLATION**

- .1 Install new circuit breakers in existing panelboards as indicated.

**END OF SECTION**