

# Molded Case Circuit Breakers

## Catalogue Numbering System

## Selection/Application

If used on 250A frame and above means non-interchangeable trip breaker with factory assembled frame and trip. Solid state trip and current limiting (S or C in first character) are non-interchangeable only, and the "X" is omitted.

### Trip Unit Type

- ☐ — Omitted — Thermal-Magnetic
- S — Sensitrip® Electronic Trip

### Sentron Series Type/Interrupting Range

- ☐ — Omitted — Standard Rating
- H — High IC Rating
- HH — Extra High IC Rating
- C — Highest IC Rating and Current Limiting

### Frame Identifier

- |               |             |
|---------------|-------------|
| E — Type ED   | M — Type MD |
| F — Type FD   | N — Type ND |
| J — Type JD   | P — Type PD |
| L — Type LD   | R — Type RD |
| LM — Type LMD |             |

### Maximum Voltage

- 2 — 240 Vac
- 4 — 480 Vac
- 6 — 600 Vac

### Number of Poles

- 1
- 2
- 3
- 9 used to indicate the max. functions for an electronic trip circuit breaker (always 3 poles)

### (Specific Application Type)

- B — Standard 40°C Breaker
- M — Calibrated for 50°C Application
- F — Frame Only
- T — 40°C Trip Unit Only
- W — 50°C Trip Unit Only
- S — Molded Case Switch
- L — Low Instantaneous Range ETI Breaker
- A — Standard Range ETI Breaker
- H — High Instantaneous Range ETI Breaker

### Maximum Continuous Current Rating

- |           |   |
|-----------|---|
| ED Frame  | — 015, 020, 025, 030, 035, 040, 045, 050, 060, 070, 080, 090, 100, 110, 125 |
| FD Frame  | — 070, 080, 090, 100, 110, 125, 150, 175, 200, 225, 250                     |
| JD Frame  | — 200, 225, 250, 300, 350, 400  |
| LD Frame  | — 250, 300, 350, 400, 450, 500, 600   |
| LMD Frame | — 500, 600, 700, 800  |
| MD Frame  | — 500, 600, 700, 800  |
| ND Frame  | — 900, 100 (1000A), 120 (1200A)   |
| PD Frame  | — 120 (1200A), 140 (1400A), 160 (1600A)                                     |
| RD Frame  | — 160 (1600A), 180 (1800A), 200 (2000A)                                     |

### Suffix

- L — where applicable indicates a breaker shipped with line/loads lugs installed
- A — used with a switch to show automatic self protection
- Y — 400 Hertz
- H — 100% rated
- P — Load side lugs only
- NAV — Navel Ratings

**NOTE:** ☐ — Position omitted if not used.

### Applicable Standards

- CSA-C22.2 No. 5, C22.2 No. 14
- UL489 — Molded Case Circuit Breakers and Circuit Breaker Enclosures.
- UL486A — Wire Connectors and

#### NOTE:

(A) Molded case circuit breakers are designed and tested in accordance to applicable portions of UL 489 and CSA22.2 No. 5 and meet application requirements of the National Electric Code. Unless marked otherwise, circuit breakers are 80% duty rated.

- Solderless Lugs for use with copper wire
- UL486B — Wire Connectors and Solderless Lugs for use with aluminum wire
- UL943 — Ground Fault Interrupters (for personnel protectors)

(B) Molded case circuit breakers are to be connected with 60 or 75°C wire for circuit breakers having a rated ampacity of 100 amperes or less. Circuit breakers having a rated ampacity greater than 100 amperes shall only be cabled with 75°C cable unless otherwise indicated on the circuit breaker label. Exceptions to this rule are outlined in the article 110-14 C(1)(2) of the 2005 National Electric Code and Canadian Electric Code.

- UL1087 — Molded Case Switches
- UL50 — Cabinets and Boxes
- UL869 — Service Equipment
- NEMA AB-1 — Molded Case Circuit Breakers and Molded Case Switches

- ① Interrupting ratings are not limited to the values or groups of values listed. However, the values listed are minimum values for the class specified.
- ② Single-unit or duplex construction must be specified.
- ③ Use minimum frame size for ampere rating.