All Magnum Breaker Types — Features, Benefits and Functions

- **200 kA interruption ratings** with current limiting performance and low current let-through to reduce damaging energy to downstream equipment at high fault levels.
- **Withstand ratings up to 100 kA** to maximize system coordination and selectivity.
- **Three physical frame sizes** (Narrow, Standard and Double) to promote breaker application in compact modular enclosures.
- **Continuous current ratings from 800 to 6000 A** with 100% rating at 40°C and no derating on most ratings up to 50°C.
- **Fixed breaker mounting configurations** with horizontal and optional vertical and front connected terminal connections.
- **Drawout breaker mounting configurations** with cassette and optional safety shutters.
- **3- and 4-pole breaker configurations.**
- **Through-the-door design** for human interface with the breaker compartment door closed.
- **Two-step stored energy mechanism** for manually and electrically operated breakers.
- **Digitrip™ RMS Trip Unit family protection** with four models each providing increasing levels of protection and feature options for coordination, information and diagnostics:
  - Microprocessor-based rms sensing
  - Basic to programmable overcurrent protection and alarms
  - Local display for information, status and diagnostics
  - Ampere, voltage and power metering
  - Power quality, harmonics and waveform capture
  - Communications with translators to common protocols
  - Zone selective interlocking for improved coordination
  - ARMs Technologies™ for arc flash reduction
  - Breaker health monitoring
- **Field-installable accessories** (UL listed) common across the breaker frames and designed to be easily installed in the field to service or modify the breaker at the point of use.
- **Secondary terminal contacts** mounted at the top front of the breaker and away from the primary voltage areas for improved safety and access. Finger-proof terminal blocks accommodate ring-tongue or spade type terminals as standard.
Breaker Features on Front Cover

The controls and indicators are functionally grouped on the breaker faceplate to optimize the human interface, visibility, and ease of use. For maximum safety, a modern, through-the-door design permits access to the breaker levering system, trip unit, controls and indicators with the door closed.

1. Mechanical Trip Flag Pop-out Indicator (Optional) — Red
2. Accessory Viewing Windows for:
   - Shunt Trip Attachment (STA)
   - Spring Release Device (SR)
   - Undervoltage Release (UVR) Device or Second STA
3. Digitrip RMS Trip Unit (Model 520M Shown) Protected by Clear Cover
4. Contact Status Indicators:
   - OPEN — Green
   - CLOSED — Red
5. Spring Status Indicators:
   - Charged — Yellow
   - Discharged — White
6. Push OFF (Open) Pushbutton — Red
7. Push ON (Close) Pushbutton — Green
8. Manual Spring Charging Handle for Manually Charging the Stored Energy Springs
9. Mechanical Operations Counter (Optional)
10. Key Off Lock (Optional)
11. Padlockable Levering Device Shutter for Drawout Breakers
12. Color-Coded Position Indicator for Drawout Breakers:
   - CONNECT — Red
   - TEST — Yellow
   - DISCONNECT — Green
Breaker Internal Features

Magnum circuit breakers are designed for ease of access for inspection, modification and maintenance at the point of use. The breaker front cover is easily removed with four captive bolts, revealing the modular internal breaker features.

1. Secondary Terminal Points for Internal Breaker Wiring Connections
2. Breaker Accessory Mounting Deck with Three Positions for Mounting:
   - Shunt Trip Attachment (STA)
   - Spring Release Device (SR)
   - Undervoltage Release (UVR) Device or Second STA
3. Digitrip RMS Trip Unit (Model 1150+ Shown)
4. Spring Charging Motor (Optional) for Electrically Charging the Stored Energy Springs
5. Manual Spring Charging Handle for Manually Charging the Stored Energy Springs
6. Padlockable Levering Device Shutter for Drawout Breakers
7. Color-Coded Position Indicator for Drawout Breakers:
   - CONNECT — Red
   - TEST — Yellow
   - DISCONNECT — Green
8. Secondary Contact Blocks for Connection to External Cell Control Wiring
9. Removable Arc Chute Covers for Easy Access to Breaker Main Contacts
10. Primary Finger Cluster Disconnecting Contacts for Drawout Breaker mounted on the Breaker Element (Not in the Breaker Compartment) for Ease of Access for Inspection and Maintenance
12. Rigid Frame Housing (Thermoset Composite Resin) Providing Increased Strength and Durability

For more information visit: www.EatonElectrical.com