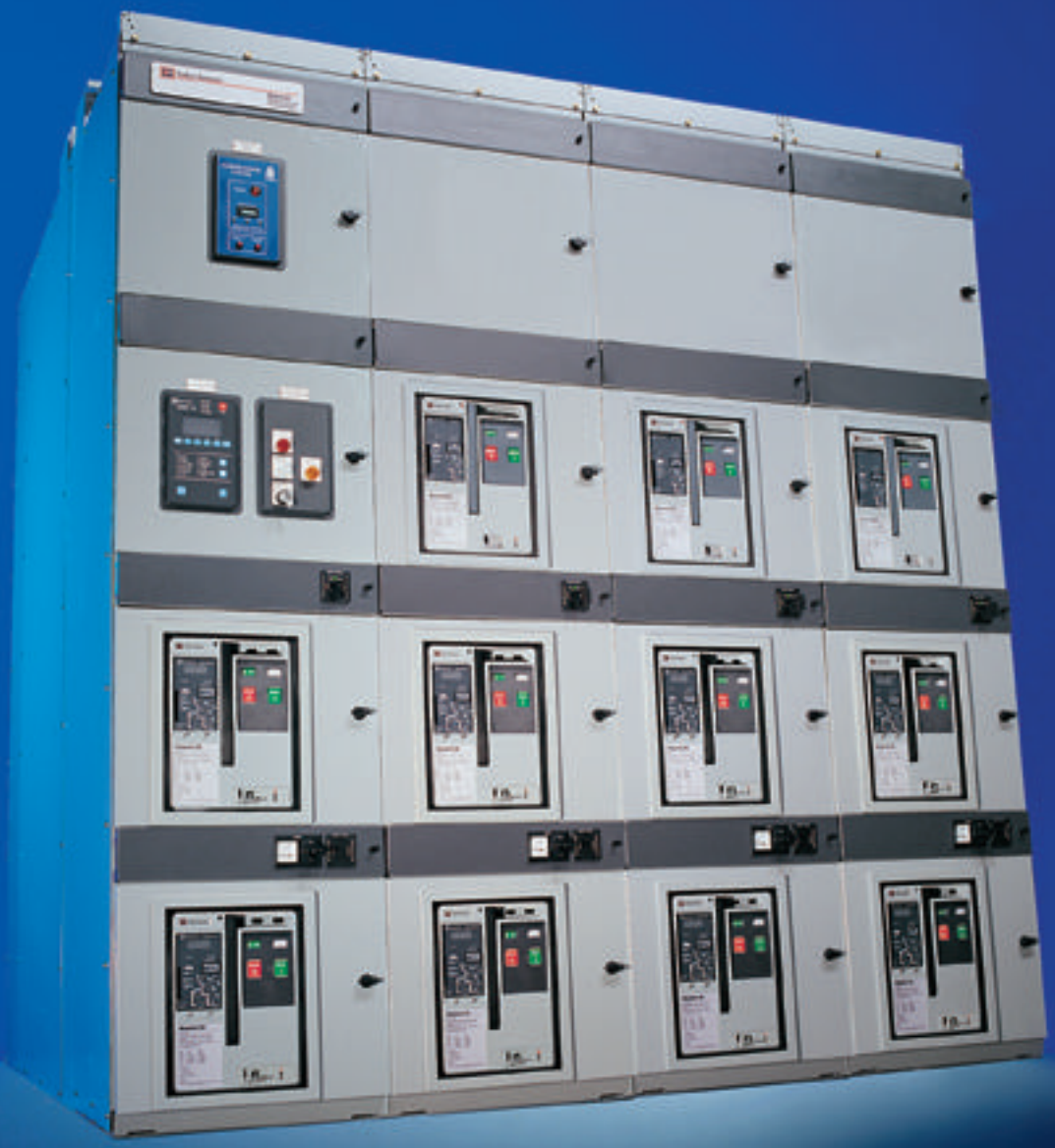
LV SWITCHGEAR

MAGNUM DS
LOW VOLTAGE METAL-ENCLOSED SWITCHGEAR

Smallest ANSI Structure…Highest Interrupting and Short Time (Withstand) Ratings



Cutler-Hammer

EATON

MAGNUM DS™ LOW VOLTAGE METAL-ENCLOSED SWITCHGEAR

Technology Advancements Plus Customer-Requested Innovative Features

- Through extensive switchgear experience, Cutler-Hammer has learned that system designers continually demand increased performance…necessitating innovative switchgear solutions that provide:
  - Higher ratings in less space.
  - A rugged structure.
  - Enhanced safety.
  - Easier maintenance.
  - Capabilities of communications and power quality monitoring and measuring.
- Cutler-Hammer engineers and scientists combined switchgear and power breaker expertise with input from customer focus groups provided during the equipment design phase…resulting in Magnum DS, the next generation of low voltage switchgear.

Through-the-Door Design

- Provides clear access to the trip unit and all breaker controls and indicators. Breaker levering is accomplished with the compartment door closed.

Safety and functionality are enhanced with Magnum DS Switchgear. Accessories can be viewed while trip unit and breaker functions are operational from the front of the breaker without opening the switchgear cell door.

Magnum DS Breakers can be conveniently levered into the connect, test and disconnect positions without opening the breaker compartment door. Three faceplate indicators identify the positions by color.

Unique Secondary Contact Placement Facilitates Wiring and Maintenance

- Mounted in the top front of each cell, located behind a separate door from the breaker.
- Allows access to secondary contacts while isolated from the power connections.
- Finger-safe contacts have hinged covers for ease of connecting.
- Each secondary contact point is dedicated to a specific function, allowing standardized wiring.

The isolated secondary wireway is uniquely located at the side of the structure, providing for top or bottom customer cell wiring without removing the breaker.

Exclusive Control Wireway Design Provides for Ease-of-Wiring in Less Time

- Control circuits can be wired in all cells without removing the breaker.
- An installer can wire the rear power circuits at the same time another is wiring the control circuits, providing up to a 50 percent reduction in installation time.

Innovative Circuit Breakers

- Magnum DS Breakers utilize unique technology breakthroughs making them the industry's smallest ANSI power breakers.
- New generation of Digitrip RMS Trip Units (520, 520M and 1150) provides increased protection, power monitoring, and communication capabilities.
- UL listed field installable accessories, which are common across the breaker family, are available for added flexibility.
- Available in both draw-out and fixed designs.

Two Structure Widths Provide Greater Capacity in Less Space

- 22-inches wide for 800, 1600, 2000, and 3200 ampere Magnum DS Breaker frames.
- 44-inches wide for 4000 and 5000 ampere Magnum DS Breaker frames.
- More breakers per square foot than with any other ANSI switchgear.
- Increased ratings in less space provide opportunities to design more robust electrical distribution systems.

Vertical Bus Configuration Provides the Industry's Highest Short Circuit and Short Time (Withstand) Ratings

- 100 kA standard bus bracing rating provided by the exclusive "U" shaped bar.
- 150 kA and 200 kA ratings, the industry's highest, are an available option.
- Short time (withstand) ratings available up to 85 kA for a full 60 cycles, the highest in the industry.

Bus Compartment Isolation with Optional Grounded Metal Barriers

- A customer-recommended optional feature since grounded metal barriers can interfere with thermal scans.
- When specified, barriers isolate the bus compartment from the cable compartment to protect against accidental contact with live bus. They also reduce the possibility of objects falling into the bus compartment.

MAGNUM DS WITHOUT CURRENT LIMITERS
Breaker Ratings at 240, 480 and 600 Volts

Maximum Amperes	Breaker Designation	Interrupting Rating	Short Time Rating
800	MDS-408 MDS-608 MDS-808 MDS-C08	42 kA 65 kA 85 kA 100 kA	42 kA 65 kA 85 kA 85 kA
1600	MDS-616 MDS-816 MDS-C16	65 kA 85 kA 100 kA	65 kA 85 kA 85 kA
2000	MDS-620 MDS-820 MDS-C20	65 kA 85 kA 100 kA	65 kA 85 kA 85 kA
3200	MDS-632 MDS-832 MDS-C32	65 kA 85 kA 100 kA	65 kA 85 kA 85 kA
4000	MDS-840 MDS-C40	85 kA① 100 kA①	85 kA 100 kA
5000	MDS-850 MDS-C50	85 kA① 100 kA①	85 kA 100 kA

① *Interrupting rating is 130 kA at 240 volts.*

Meets All Standards

- Built and tested to ANSI C37.20.1 and C37.51, UL 1558, NEMA SG3 and SG5, and CSA standards. Manufactured and assembled in ISO certified facilities.

Maximum Ratings

- 600 volts ac.
- 6000 amperes continuous cross bus.
- 5000 amperes continuous vertical bus.
- 200 kA short circuit.

More Information

Additional literature about this innovative next generation ANSI Switchgear and Power Breakers is available from authorized Cutler-Hammer distributors or sales engineers. Ask for Publication No. B.44A.01.S.E and PA.22F.01.S.E.

For more information on Cutler-Hammer products and services, call 1-800-525-2000 or 1-732-417-5660, or visit our website at www.cutlerhammer.eaton.com

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