Understanding the challenges.
Engineering the solutions.

Oil and Gas
Data Center
Healthcare
Industrial

EATON
Powering Business Worldwide
As a premier leader in power distribution equipment, Eaton offers a wide range of innovative, low voltage switchgear designs providing flexible solutions to optimize operational performance, enhance safety and save space.

**Rear access**

- Lower installation and maintenance costs, higher interrupting and withstand ratings, enhanced safety, higher quality, reliability and maintainability

**Front access**

When floor space is limited, or room constraints dictate that equipment be mounted against a wall, why compromise on switchgear design? Eaton’s Magnum DS front-accessible switchgear combines the robustness of UL 1558 low voltage switchgear with the flexibility of UL 891 switchboard design. The front-accessible switchgear offering allows mounting against a wall, or in other tight locations, where a standard rear-accessible switchgear lineup would not normally fit.

**Rear access**

- UL 1558/891
- Up to 10,000A continuous current – horizontal main bus
- Up to 5,000A continuous current – vertical riser bus
- Short circuit withstand rating of 200,000 amperes with no fuses.
- Bus standard bracing is 100,000 amperes – optional 150,000
- 4-wire applications, 100% neutral
- Ground the full length of the switchgear assembly
- Optional safety shutters
- Rear cover or doors
- Control wire standard Type SIS insulated stranded copper.
- Integrated HRG, optional (HRG can be stand alone or wall mount)
- MDN 4000A in 30" structure
- 508 Vac—100 kAIC maximum short circuit
- 635 Vac—65 kAIC maximum short circuit

**Front access**

- UL 1558
- Up to 6,000A continuous current – horizontal main bus
- Up to 5,000A continuous current – vertical riser bus
- 100, 150 and 200 kA bus bracing designs
- 600 Vac class
- NEMA®1 indoor
- NEMA 3R outdoor, both aisle and aisleless enclosures
- Standard 40.20-inch switchgear depth
- Up to 4-high breaker arrangement
- Breaker sections are 18, 22 or 44 inches wide
- Cable compartments are 18, 22, 30 or 44 inches wide

**Integrated HRG**

- NRX integration
- 800A continuous current with 65KA short circuit and 42KA short time (30 cycle withstand) for UL 1558
- 1200A continuous current with 85KA short circuit for UL 891
- 24" enclosure – two 3P NRX breakers side by side

**NRX Integration**

- 800A continuous current with 65KA short circuit and 42KA short time (30 cycle withstand) for UL 1558
- 1200A continuous current with 85KA short circuit for UL 891
- 24" enclosure – two 3P NRX breakers side by side

Eaton listens and learns from customers to understand the unique operational challenges across industries. This drives our pursuit for innovation and the application of our expertise to engineer low voltage switchgear solutions that consistently deliver on performance, safety and savings.
Remote racking

As a premier leader in power distribution equipment, Eaton offers a wide range of innovative, low voltage switchgear designs providing flexible solutions to optimize operational performance, enhance safety and save space.

Rear access:
• UL 508A
• Up to 10ka continuous current – vertical line bus
• Short circuit withstand rating of 20k VEBI with no fuse
• Bus standard bracing is furnished with no fuse
• MDN 4000A in 30” structure
• Integrated HRG optional (HRG 4-wire applications, 100% 150,000 Bus standard bracing is furnished with no fuse)

Front access:
• UL 508A
• Up to 6ka continuous current – horizontal main bus
• Up to 10ka continuous current – vertical line bus
• NEMA® motor
• NEMA 3J enclosure – both side and anterior enclosures
• Standard 105C design
• Standard breaker depth
• 1200A continuous current with 20ka short circuit withstand rating UL 1077C
• 22”, 30, or 44 inches wide

Magnum DS switchgear accessories
Genuine Magnum DS switchgear accessories improve the reliability, safety and longevity of the switchgear.

ArcQuench® arc-resistant front access
ArcQuench® arc-resistant front access from Eaton provides the reliability and strength of an insect-resistant removable enclosure, but without the inherent arc fault risk. ArcQuench® switchgear has been tested on three compartments for a 6 second (60 cycle withstand) of Type 2 semi-enclosed at 100 kA at 600V and 85 kA at 690V.

ArcGard™ arc-resistant rear access
ArcGard™ arc-resistant rear access from Eaton offers the robustness and strength of an insect-resistant removable enclosure, but without the inherent arc fault risk. ArcGard™ switchgear has been tested on three compartments for a 6 second (60 cycle withstand) of Type 2 semi-enclosed at 100 kA at 600V and 85 kA at 690V.

NXA integration
• 600A continuous current with 20ka short circuit withstand rating
• 105C enclosure
• 66” minimum line-up width

Magnum DS Switchgear Accessories

Cable lashing device
The Cable Lashing Device can be used to secure cables/ducts/meter bases/ etc. compared to the traditional paper clips method.

Magnum’s shutter module
The Magnum shutter module is used to test the operation of the switch and the breaker access to the bus bars for inspection and testing.

Front access
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Automatic transfer and intelligent control packages
pre-engineered • flexible • smart

Eaton’s Magnum DS low voltage switchgear offers optional pre-engineered automatic transfer and intelligent control packages with features that can be modified to meet specific requirements. The packages are available on both standard and arc-resistant switchgear as well as both front and rear access equipment. Classified by the interface, the automatic transfer and intelligent control packages are as follows:

- Eaton ATC-900 controller
- Eaton PLC with Eaton touchscreen
- Power Xpert™ dashboard

**Features and benefits**

**Eaton ATC-900 controller**

This controller can be utilized for transfer in a lineup with Main-Main, Main-Generator or Generator-Generator application (no tie breaker present). This option will include a selector switch for Auto/Manual as well as generator start/stop/exercise.

**Eaton PLC with Eaton touchscreen**

Using the Eaton PLC and Eaton touchscreen, Eaton can provide automatic Main-Tie/Main transfer to increase uptime and efficiency. The desired sequence of operation can be selected during project quotation.

**Power Xpert™ dashboard**

The Power Xpert dashboard is an intelligent collection of views which allow users to configure a switchgear assembly and continuously monitor and control various devices and parameters. The dashboard can be integral to the switchgear assembly or remotely mounted offering a monitoring and control option outside the arc flash zone. It provides features required to maintain a switchgear assembly such as:

- Remotely open/close circuit breakers through control mode
- Initiate a transfer scheme in a Main/Tie/Main switchgear for uninterrupted power supply
- Ability to configure/monitor alarms for various devices
- Provides a rich interface to monitor parameters of all devices and study the trends of those parameters.

For more information, visit [www.eaton.com/lva](http://www.eaton.com/lva) or call your local Eaton sales office.