

Magnum circuit breakers with Power Xpert Release trip units



Digitally transform your switchgear with Eaton's Magnum[™] circuit breakers with Power Xpert[™] Release (PXR) trip units for a more connected, reliable and safe system.

Digitally enhanced low-voltage power breaker portfolio

The Magnum low-voltage power breakers with PXR technology deliver accurate and intelligent circuit protection for UL®1558 switchgear and UL 891 switchboard applications. The digital enhancements of the PXR electronic trip units combined with the proven reliability of Eaton's Magnum PXR air circuit breakers (ACB) provide customers the ability to improve system health, accurately and efficiently diagnose system issues, and field test quickly for increased uptime.

Our compatible software and apps enhance commissioning and maintenance efforts, providing intuitive interfaces for set up of trip unit protection and operating parameters, secondary injection testing, troubleshooting, system situational awareness and reports. The PXR trip units provide an enhanced and easy-to-use software interface, which displays a summary for critical performance parameters, such as current and energy usage, frequency, harmonics and zone selective interlocking (ZSI) status. Additionally, a scroll-through menu provides access to more detailed metrics, password protected settings and access to the testing functionality.





Advanced algorithms provide system health and improved safety

The PXR trip unit's breaker health feature and programmable relays/alarms help you to avoid costly downtime by enabling you to predict maintenance requirements on your power distribution system and alarm prior to component failure. The breaker health application aggregates system performance and events data to provide maintenance recommendations for that specific breaker. The programmable relays can be set up to provide pre-alarms to overload or ground fault conditions, as well as to breaker status, including health parameter level.



The ZSI system provides a means for breakers to coordinate during phase or ground faults, enabling the breaker closest to the fault to override user-defined delay settings to quickly clear the fault while minimizing downtime and reducing thermal and mechanical stress on the equipment. PXR trip units also display ZSI status and provide a visual indication when the restraining signal is received from downstream units. With PXR 35, ZSI can be achieved using GOOSE messaging.

For added protection, the breaker incorporates Eaton's patented Arcflash Reduction Maintenance System[™] to reduce arc flash level energy by decreasing the fault clearing times when enabled. The innovative safety feature can be enabled locally or remotely via communications or a remote switch, and can help decrease personal protective equipment (PPE) requirements to enhance productivity, while also improving personnel safety.

Perform maintenance at a safe distance

The new integral motorized remote racking (MR2) solution offers another Eaton first in safety features for the Magnum line of ACBs. Combined with Eaton's Arcflash Reduction Maintenance System and ZSI, Magnum breakers offer unparalleled protection for personnel and equipment in low-voltage power distribution. The innovative MR2 solution allows you to remotely insert a breaker into its cell from the disconnected position while safely remaining outside the arc flash boundary.

Eaton Power Distribution Monitoring and Control (PDMC) can be used as a clear simple one-line display interface of all your Magnum PXR breakers and communicate to the PXR trip units to display metering, status, alarms and system health, as well as provide the ability to remotely enable the Arcflash Reduction Maintenance System protection or perform remote rack-in/rack-out operations.

Optional Bluetooth is available on PXR 35 trip units. Users can connect and use PXPM via Bluetooth from outside the arc flash boundary.

Features and benefits

- Industry-exclusive MR2 feature allows you to perform maintenance through Eaton's intuitive software at a safe distance
- Embedded communications and revenue-grade energy metering accuracy help to reduce cost by eliminating the need for separate meters; easily connect and push data through our PDMC via direct Modbus® RTU, Modbus TCP communications adapter module (CAM) or integrated Ethernet with the PXR 35
- Cost-effectively perform secondary injection testing with Eaton's intuitive Power Xpert Protection Manager (PXPM) software



- Breaker health and advanced algorithms help avoid costly downtime by enabling predictive maintenance on your power distribution system prior to component failure
- Arcflash Reduction Maintenance System reduces potential incident arc flash energy levels by providing faster clearing times at lower instantaneous pickup levels, reducing your PPE requirements and improving personnel safety and productivity
- Multiple programmable high load and ground fault alarms help avoid costly downtime by providing pre-trip indications
- Loads of advanced and enhanced protections with PXR 35 trip unit

Why Eaton?

As life at home is impacted by the aspects of digital technology, so are the distribution assemblies you manage and maintain every day to keep the power flowing and operations up and running. Don't wait for the transformation to take shape. Integrate Eaton's digitally enhanced Magnum circuit breakers with PXR trip units for a safer, smarter and more reliable system.

For more information, visit **Eaton.com/magnumpxr** or contact your local Eaton sales representative.

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