

PXR 35 trip unit Magnum PXR and Power Defense SB



PXR 35 trip units for Magnum PXR and Power Defense SB circuit breakers



Digitally transform your low-voltage assemblies with Eaton's PXR 35 trip unit available in Magnum PXR and Power Defense SB circuit breakers for a more connected, reliable and safe system.

Digitally enhanced low-voltage power breaker portfolio

The Magnum™ Power Xpert™ Release (PXR) family of low-voltage circuit breakers now has an even more advanced trip unit—the PXR 35. The digital enhancements of the PXR electronic trip units combined with the proven reliability of Eaton's Magnum PXR air circuit breakers (ACB) and Power Defense™ SB insulated case circuit breakers (ICCB) 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 setpoints 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 more than 50 critical performance parameters, such as current and energy usage, frequency, harmonics and zone selective interlocking (ZSI) status. Additionally, a colored touch screen provides access to more detailed metrics, password protected settings and access to the testing functionality.



EATON

Powering Business Worldwide

Advanced algorithms provide system health and improved safety

The PXR trip unit's breaker health feature and programmable relays 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 algorithm in the PXR 35 trip unit aggregates additional system performance and events data compared to PXR 20/25 to provide more detailed maintenance recommendations. The programmable relays can be set up to provide pre-alarms to overload or ground fault conditions, as well as to indicate breaker status, including health parameter level.



The ZSI system provides a means for breakers to coordinate during an event, 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 display ZSI status and provide a visual indication when the restraining signal is received from downstream units. With PXR 35, ZSI signals can be sent via IEC 61850 GOOSE messaging, which eliminates the need for twisted pair wiring.

For added protection, the breaker incorporates Eaton's patented Arcflash Reduction Maintenance System™ to reduce the arc flash energy level by decreasing the fault clearing times when enabled. The innovative safety feature can be enabled 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 and Power Defense 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's Power Distribution Monitoring and Control can be used as a clear simple one-line display interface of all your Magnum and Power Defense breakers with PXR 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.

Features and benefits

- Embedded communications and 0.5% power and energy metering accuracy help to reduce cost by eliminating the need for separate meters; easily connect and push data through Eaton's Power Distribution Monitoring and Control via direct Modbus® RTU, integrated Ethernet (IEC 61850 or Modbus TCP)
- Perform secondary injection testing with Eaton's Power Xpert Protection Manager (PXPM) software without the need for a test kit
- Save time and cost when changing the continuous current rating digitally with PXPM
- The advanced breaker health algorithm with contact wear helps 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, which lowers PPE requirements and improves personnel safety and productivity
- Multiple programmable high load and ground fault alarms help avoid costly downtime by providing pre-trip indications
- Industry-exclusive MR2 feature allows you to perform maintenance through Eaton's intuitive software at a safe distance
- View the effects of any event across multiple breakers when using PXR 35 with Global Event Capture
- Easily set up transfer schemes through PXPM without the need for a separate controller



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 and Power Defense 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.

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

©2025 Eaton
All Rights Reserved
Printed in USA
Publication No. PA013010EN / Z29827
January 2025

EATON
Powering Business Worldwide

Eaton is a registered trademark.
All other trademarks are property of their respective owners.

Follow us on social media to get the latest product and support information.

