

Eaton's Pow-R-Demand Panelboard

Compact, versatile and easily scalable architecture developed for increasing energy demands.



With changing demands and growing customer requirements, Eaton has enhanced its panelboard offering to include intelligent panelboards that provide added features such as metering for breakers, load shedding and accessibility via IoT technologies and communication devices. Eaton can provide software services to support hardware integration to the overall system or customers may choose to implement their own software solutions.

Features and Benefits

Reduce space with an integrated design

- Consolidated branch circuit controls and energy metering.
- Simplified design to reduce wall space footprint.

Simplify scalability

• Flexible design, allows for further expansion of growing system architecture.

Minimize Labour

- Reduction of material and labour cost due to fewer control and metering cabinets.
- Labour savings due to simplified installation process.

Safety Enhancements

- Live component contact prevention.
- · Communication access without removing trim or deadfront.



Panelboard components

Controllable circuit breakers



Eaton solenoid-operated circuit breakers integrate branch circuit protection and control into a single device. By providing accurate status and override controls with integrated solenoid mechanisms with 15A, 20A, 30A, 40A, and 50A, singleand two-pole configurations suitable for up to 480 Vac.

Breaker Control Bus



Eaton's Breaker Control Bus (BCB) provides the electronic interface and power switching signal between the controller and solenoid-operated controllable circuit breaker placed on the panelboard interior rails. Each controller can be connected to a maximum of eight BCBs. Each BCB is connected to the controller by connecting SLAN sub-net network.

Integrated PXBCM Metering



Integrated metering configurations provide compact footprint to deliver a cost-effective energy and power monitoring solution. Using Eaton PXBCM meter to monitor main and a branch circuits. Identify wasteful energy practices to implement energy saving solutions with remove monitoring capabilities.

Controller



Eaton PLC's offers diverse capabilities in schedule- and occupant-based control as well as load shedding. Remote communication options include Ethernet and Modbus TCP or external to Modbus RTU using RS-485 connection. Eaton PLC's provide BACnet/IP communications protocol into building automation systems. An option for additional HMI visualization is available in any Pow-R-Demand panelboard system. The communication options have IoT capability and accessibility through HTML5 (custom software required) via smartphone, tablet, and PC.

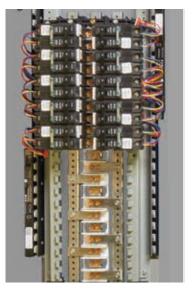
Pow-R-Demand panelboard applications

Eaton's Pow-R-Demand panelboard can benefit numerous industries, from:

- · Residential buildings
- · Commercial Buildings
- · Office buildings
- · Shopping Centers



PLC integration



Panelboard chassis with solenoid breakers installed

5050 Mainway Burlington, ON Canada eatoncanada.com











