A smarter, more energy-efficient panelboard solution

Eaton's Pow-R-Line™ Branch Circuit Monitoring (PXBCM) panelboard is an integrated, affordable metering device that combines exceptional performance and easy installation to deliver a cost-effective solution for energy and power monitoring at the branch circuit level.

It can monitor up to 84 branch circuits and 16 main and auxiliary panel connections.

Overview

The Pow-R-Line PXBCM panelboard also provides a means to monitor the main power coming into the panelboard and up to four additional three-phase meters. The Pow-R-Line PXBCM panelboard can be used in lighting appliance, small power distribution panelboards and Pow-R-Command™ lighting control panelboards up to 400 A with branch breakers rated 125 A or below.

The Pow-R-Line PXBCM panelboard is available in PRL1a, PRL2a and PRL3e panelboard classifications.

Get closer to LEED® certification

There is a rapidly changing emphasis on LEED designs, and the Pow-R-Line PXBCM panelboard helps you to meet the measurement and verification points required by LEED and the U.S. Green Building Council.

Up to 5 points are available with the use of the Pow-R-Line PXBCM panelboard.

Benefits

With Modbus® RS-485 and TCP output standard, the Pow-R-Line PXBCM panelboard offers flexibility for onboard configuration, as well as communication and data analysis through an integrated Web server or a number of building automation sources, including Eaton's Power Xpert™ and Foreseer® products.

The Pow-R-Line PXBCM panelboard allows you to:

- Make informed load shifting and load shedding decisions
- Fairly and accurately allocate energy costs to users
- Identify wasteful practices
- Decrease unnecessary usage
- Produce an energy profile

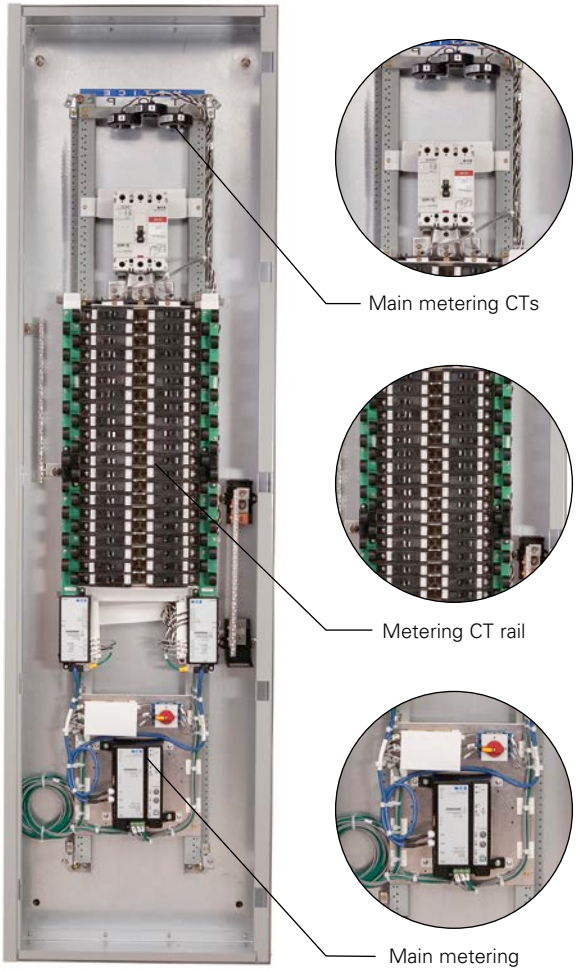
Key features

- Power and energy readings at the branch circuit level
- Integrated Web server for remote monitoring and configuration
- Optional remote color touchscreen display for local reading
- Compatible with the Power Xpert Gateway for remote monitoring

Typical applications

- Energy management
- Industrial monitoring
- Cost allocation
- Data center management
- Light commercial
- Industrial
- Institutions

Powering Business Worldwide



Measured parameter	Main	Branch	Virtual ❶
Current per phase	■		
Maximum and minimum current per phase	■		
Current demand per phase	■		
Peak current demand per phase	■		
Forward and reverse energy (kWh) per phase	■		
Maximum and minimum real power (W) per phase	■		
Apparent power (VA)	■		■
Power factor total ❷	■		
Power factor per phase	■		
Maximum and minimum voltage (line-to-line)	■		
Maximum and minimum voltage (line-to-neutral)	■		
Maximum and minimum frequency (phase A)	■		
Current		■	
Maximum current		■	■
Current demand		■	
Maximum current demand		■	
Real power (W)		■	
Forward and reverse real power (W) demand		■	■
Forward and reverse energy (kWh) per circuit		■	
Maximum apparent power (kVA)		■	
Power factor		■	■
Virtual meters			■
Average current			■
Forward and reverse real energy (kWh)			■
Forward and reverse real power (W) demand			■
Forward and reverse real power (W) peak demand			■
Maximum real power (W)			■
Maximum apparent power (VA)			■

❶ Virtual means Web server.

❷ Based on a three-phase breaker rotation.

ANSI C12.20 (0.5%) system accuracy:

Meets utility billing accuracy requirements.

Overload alerts:

Indicates when the circuit is close to exceeding its threshold, helping minimize or prevent downtime.

NEMA enclosure options

A variety of NEMA® enclosures are available as options: NEMA Type 1, 2, 3R, 4, 4X and 12. Pow-R-Line 1a, 2a with 400 A main bus, all PRL3e and Pow-R-Command panel applications require a 28-inch wide box to provide additional gutter space for cable bending.

Dimensions in inches (mm)

Heights

36 (914.4)

42 (1066.8)

48 (1219.2)

60 (1524.0)

72 (1828.8)

90 (2286.0)

Widths ❶

20 (508.0)

28 (711.2)

Depth ❶

5.75 (146.1)

❶ Dimensions for NEMA Type 1 enclosure. For dimensions of optional NEMA enclosure, contact your Eaton distributor or sales engineer.

Factory-installed modifications and accessories

Because each Pow-R-Line 1a, 2a and 3e panelboard is assembled by an experienced technician, we can easily and efficiently incorporate any combination of modifications and accessories, including:

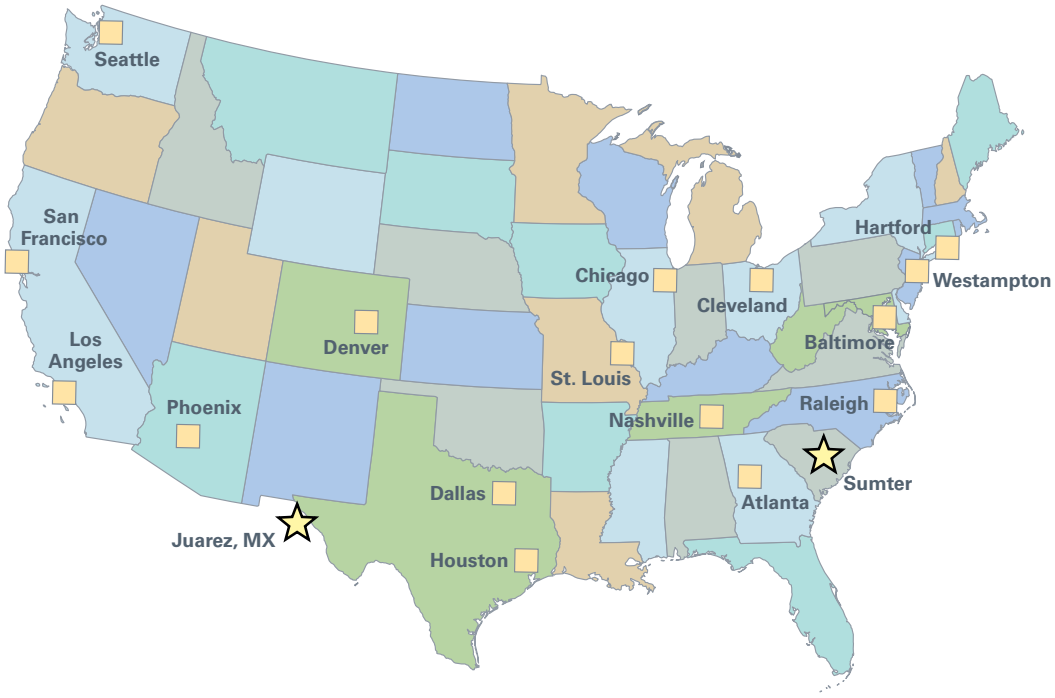
- Breaker lock-off devices
- Compression type lugs (main lugs only)
- Ground fault breakers
- Arc fault breakers
- Increased dimensions
- Trim to fix existing boxes
- Main breakers with solid-state trip units
- Permanent circuit numbering
- Service entrance
- Special doors and locks
- Surge protection devices
- Pow-R-Command lighting control

Note: Contact your local Eaton distributor or sales engineer for additional information on these and other modifications and accessories.

Pow-R-Line 1a, 2a and 3e specifications

Description	Rating
Pow-R-Line 1a ratings	
Voltage	240 Vac maximum
Main breaker	100–400 A ❶
Main lug	100–400 A ❶
Maximum kAIC	10–22 kA fully rated
	22–200 kA series rated
Branch circuit breaker	15–100 A
Branch breaker connector	140 A
Branch circuit breaker types	BA (BAB, BAB-H), QBH (QBHW, QBHW-H), QBGFT, QBGFEP, QBHGFT, QBHGFEP, HQP, QPHW, QHPX, QPGF, QPHGF, QPGEP, QPHGFEP, BABR, QBAF, QBAG, QBHAF, QBCAF and QBHCAF
Pow-R-Line 2a ratings	
Voltage	240 Vac, 480Y/277 Vac and 125/250 Vdc maximum
Main breaker	100–400 A ❶
Main lug	100–400 A ❶
Maximum kAIC	240 Vac: 65 kA fully rated 65–200 kA series rated
	480Y/277 Vac: 14 kA fully rated 22–150 kA series rated
	125/250 Vdc: 10–14 kA fully rated
Branch circuit breaker	15–100 A
Branch breaker connector	140 A
Branch circuit breaker types	GB, GHB, GHBGFEP, GHBS, HGHB, GQ, GHQ, GHQRS and GHQRSP
Pow-R-Line 3e ratings	
Voltage	240 Vac, 480Y/277 Vac or 480 Vac and 250 Vdc maximum
Main breaker	125–400 A ❶
Main lug	100–400 A ❶
Maximum kAIC	240 Vac: 20–100 kA fully rated 100–200 kA series rated
	480Y/277 Vac or 480 Vac: 18–65 kA fully rated 65–100 kA series rated
	250 Vdc: 10–42 kA fully rated
Branch circuit breaker	15–125 A
Branch breaker connector	140 A
Branch circuit breaker types	EGB, EGS and EGH

❶ 600 A is available without main metering.



Eaton Pow-R-Line panelboards and switchboards are built to your requirements at our world-class manufacturing plants in Sumter, SC and Juarez, MX. In addition, Eaton has 16 regional Satellite facilities located across the country to meet your panelboard and switchboard service needs.

For an unparalleled commitment to your specific needs, please visit your local Satellite facility.

Atlanta
7000 Highlands Parkway SE
Suite 102
Smryna, GA 30082
678.309.4260

Baltimore
7451 Coca Cola Drive
Suite C
Hanover, MD 21076
410.796.7777

Chicago
230 Windy Point Drive
Glendale Heights, IL 60139
630.260.6303

Cleveland
12875 Corporate Drive
Unit E
Parma, OH 44130
216.265.3284

Dallas
631 Westport Parkway
Suite 100
Grapevine, TX 76051
817.251.6733

Denver
2450 Airport Road
Suite C
Aurora, CO 80011
303.366.2080

Hartford
40A International Drive
Windsor, CT 06095
860.298.1305

Houston
14825 Northwest Freeway
Suite 100
Houston, TX 77040
713.744.7530

Juarez
Prolongacion Hermanos Escobar
#7014, Parque Industrial Omega
Adicion Oriental Cd.
Juarez, Chichauha Mexico 32648

Los Angeles
13201 Dahlia Street
Suite 300
Fontana, CA 92337
919.428.8903

Nashville
1421 Gould Boulevard
Suite C
La Vergne, TN 37086
615.287.3200

Phoenix
560 N 54th Street
Suite 1
Chandler, AZ 85226
480.449.4222

Raleigh
9400 Globe Center Drive
Suite 121
Morrisville, NC 27560
919.544.7074

St. Louis
56 Soccer Park Road
Fenton, MO 63026
636.717.3500

Sumter
Main Manufacturing Plant
845 Corporate Circle
Sumter, SC 29154
803.481.3131

San Francisco
20923 Cabot Boulevard
Hayward, CA 94545
510.784.8981

Seattle
1604 15th Street SW
Suite 114
Auburn, WA 98001
253.833.5021

Westampton
96 Stemmers Lane
Westampton, NJ 08060
609.835.4230

For more information, visit Eaton.com/lightingpanels

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

Printed in USA
Publication No. PA014001EN / Z19819
January 2018

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

Powering Business Worldwide