Legrand®
Wiremold

Sentrex®
Surge Protection Devices

PA and PB Series
Panel Protection Devices

Wiremold® Sentrex® PA and PB Series surge protection devices protect your sensitive electronic equipment from external or internal transient activity. Units can be customized with remote monitoring, noise filtration and flush mount options.

All PA and PB units are approved for indoor or outdoor use and feature all-mode protection. Units provide excellent protection when placed at branch panels or at specific pieces of equipment. They can also suppress external surges when mounted at the main service panel.

PA and PB Series surge protection devices are an integral part of the Sentrex Zoned Approach to Whole Building Protection.

Meets UL1449 Third Edition

The PA and PB Series provide surge protection at the main service panel, sub panel or at sensitive equipment.

FEATURES & BENEFITS

- ■ **Up to 160kA maximum surge current protection per phase.**
- ■ **Easy installation.** Enclosure can be easily drilled or punched for conduit/cable access and positioned to the electrical panel at the discretion of the installer.
- ■ **All-mode protection is standard on all units.**
- ■ **NEMA 1, 2, 3, 3S, 4, 4X, 12, 13 rated, water-tight, fire-resistant plastic enclosure.**
- ■ **34mm MOV circuitry.** Well exceeds the capacity of 20mm MOVs in parallel to manage surges over time.

- ■ **Type 2 Surge Protective Device (SPD).** Nominal Discharge Current (In) Rating of 5kA
- ■ **Short circuit and thermal fusing.**
- ■ **Low impedance circuitry.**
- ■ **Visual indication of protection status.**
- ■ **Ten-year product warranty.**
- ■ **cETLus Listed to UL1449 Third Edition.**

AVAILABLE OPTIONS

- ■ **Remote diagnostic connection**. Using NO/NC dry contacts via on-board relay. Remote monitoring device sold separately.

- ■ **EMI/RFI noise filter.** Noise attenuation -20dB maximum 100 kHz to 100 MHz.
- ■ **Flush mount cover**. Sold separately.

PA/PB Series Product Selection Guide

PB Series – 160kA

CATALOG NUMBER	VOLTAGE (V ac)	PHASE	MCOV*	VOLTAGE PROTECTION LEVEL (VPR)							IN RATING
				L-N	L-G	N-G	L-L	H-N	H-G	H-L	
PB-120T	120/240	1	150/300	800	1200	700	1500	–	–	–	5kA
PB-120Y	120/208	3Y	150/300	800	800	700	1500	–	–	–	5kA
PB-240DCT	120/240	3H	150/300	800	1200	800	1500	1200	1500	1800	5kA
PB-277Y	277/480	3Y	320/640	1200	2000	1200	2000	–	–	–	5kA

* Maximum Continuous Operating Voltage

L – (Line), N – (Neutral), G – (Ground), H – (High Leg), +D – (Delta), Y – (Wye), H – (High Leg Delta)

PB Series – 80kA

CATALOG NUMBER	VOLTAGE (V ac)	PHASE	MCOV*	VOLTAGE PROTECTION LEVEL (VPR)							IN RATING
				L-N	L-G	N-G	L-L	H-N	H-G	H-L	
PA-120T	120/240	1	150/300	800	1200	700	1500	–	–	–	5kA
PA-120Y	120/208	3Y	150/300	800	800	700	1500	–	–	–	5kA
PA-240DCT	120/240	3H	150/300	800	1200	800	1500	1200	1500	1800	5kA
PA-277Y	277/480	3Y	320/640	1200	2000	1200	2000	–	–	–	5kA

* Maximum Continuous Operating Voltage

L – (Line), N – (Neutral), G – (Ground), H – (High Leg), +D – (Delta), Y – (Wye), H – (High Leg Delta)

Options: (select options by adding hyphen and suffix to part number)

A – Remote Monitoring Capability
Adds NO/NC dry contacts to PA/PB unit via on-board relay. Dry contacts will allow for connection of remote monitoring unit. Remote monitoring unit itself sold separately under part #ZHRMU. See page 3 for ZHRMU specifications.

B – Noise Filter
Provides noise attenuation of -20dB maximum 100kHz to 100 MHz.

How to Configure A Part Number:

1 **Select CATALOG NUMBER.**

2 **Select OPTIONS if desired.**

3 **Part Number is CATALOG NUMBER, followed by HYPHEN, followed by OPTIONS in alphabetical order.**

<u>SAMPLE</u>
**160kA for 120/208V
with Noise Filter**

<u>SAMPLE</u>
**80kA for 277/480V
with Remote Contacts
with Noise Filter**

<u>SAMPLE</u>
**80kA for 120/240V
No Options Selected**

Part#: PB120Y-B

Part#: PA277Y-AB

Part#: PA120T

PA/PB Series Accessories

Product	Description/Specifications

Remote Monitoring Unit

Offers clear audio/visual indication of the status of the surge suppressor unit. The RMU can be installed adjacent to the suppressor or as a remote installation. Can also be used as a standalone diagnostic device using NO/NC dry contacts. Powered by 2 AA alkaline batteries (included) which will power the unit for approximately 2 years. Unit connects with with Cat5 cable (not included).

SPECIFICATIONS

Dimensions:	5.4" x 2.6" x 1.3" [13.7mm x 6.6mm x 3.3mm]
Weight:	Approx. 0.35lb [0.16kg] including batteries.
Protection Indication:	Bright green LED: Illuminated, flashing
Fault Indication:	Audible alarm. Bright red LED: Illuminated
Test Functions:	Switch tests audible alarm (checks monitoring circuitry)
Silent Function:	Switch silences audible alarm
Connections:	Accepts wires up to #14 AWG (Cat5 recommended)

PABFMC

Flush Mount Cover – For installing PA/PB units on sheetrock or firewall construction. Cover hides the hole cut and gives the unit a finished look. Brushed metal cover can be painted to match any decor.

SPECIFICATIONS

Dimensions:	9" x 7" [229mm x 178mm]

* NOTE: ZHRMU can only be used on PA/PB Units with remote contacts (Option A). ZHRMU is also compatible with all ZoneMaster Units (see ED1165 for details).
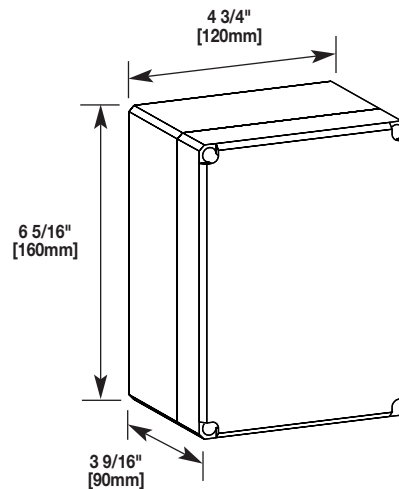
MECHANICAL SPECIFICATIONS:

Enclosure: Durable, lightweight, corrosion-resistant high impact plastic. Approved for outdoor or indoor use. NEMA 1, 2, 3, 4, 4X, 12, and 13 rated.

Dimensions: 6 5/16" x 4 3/4" x 3 9/16" (160mm x 120mm x 90mm).

Weight: PB Series: 1.8 lbs. (0.8 kg), PA Series: 1.4 lbs. (0.6 kg).

Operating Environment: -40°C to 85°C, 95% relative humidity (non-condensing).

Construction: Low impedance circuitry. Single board system to minimize transient impedance and suppression voltage.

Terminal Lugs: #10 AWG maximum and recommended wire size.

Mounting: Built-in mounting holes, 11/64" [4.4mm] diameter. Enclosure can be easily drilled or punched for conduit/cable access.

ELECTRICAL SPECIFICATIONS:

Maximum Surge Current Capacity Per Phase: **PB Series: 160,000A** **PA Series: 80,000A**

Maximum Surge Current Capacity: Per Mode: **PB Series:** L-G 80,000A (8/20μs), L-N 80,000A (8/20μs), L-L 80,000A (8/20μs), N-G 80,000A (8/20μs)

PA Series: L-G 40,000A (8/20μs), L-N 40,000A (8/20μs), L-L 40,000A (8/20μs), N-G 40,000A (8/20μs)

Duty Cycle Performance (Surge Life): PB Series: 20 pulses at 10,000A PA Series: 10 pulses at 10,000A

Maximum Continuous Operating Voltage: 20% above nominal

Optional Remote Indication Contacts: NO/NC dry contacts via on-board relay, 125VAC, 2A rated

Optional EMI/RFI Noise Attenuation: -20dB Maximum 100 kHz to 100 MHz

Diagnostics: Green LED per phase indicates protection present on each phase

Protection Technology: 34mm MOV based, backed by thermal and short circuit fusing

Installation: Unit should be connected through a dedicated 30 amp circuit breaker with the appropriate poles (customer supplied).

Questions? Call Technical Support at 1-800-SENTREX

ED1198R2 – Updated October 2010 – For latest specs visit www.legrand.us/wiremold