

## Power Quality Products

## TVSS Products

## PANELMASTER™ Branch Panel

Surge Protection Panels

160,000 Peak Amperage Capacity



HBL4PM160



HBL4PM160



HBL160PMM120



### PanelMaster Panel Extensions 20kA Short Circuit Current Rating

Voltage	Catalog Numbers	Replacement Modules
Single Phase 120/240V AC	<b>HBL3PM160</b>	<b>HBL160PMM120</b>
3Ø Wye 120/208V AC	<b>HBL4PM160</b>	<b>HBL160PMM120</b>
3Ø Wye 277/480V AC	<b>HBL8PM160</b>	<b>HBL160PMM277</b>

Notes: Surge counter available, catalog number HBLSC.  
For technical information, see page J-16.

### PanelMaster™ Series

The most innovative and flexible technology in the surge suppression industry today. The PanelMaster series is a 160kA rated product that mounts on top of your branch panel resulting in the best possible surge protection. The patented feed-through design of the PanelMaster series eliminates long lead lengths and achieves superior clamping levels.

In addition to this, the PanelMaster series by Hubbell also features the non-interrupting “Hot Swappable” design. This patented design allows the end user to replace modules without disconnecting power to the panel.

PanelMaster series’ flexibility allows it to be field-mounted to any manufacturer’s standard panel without consuming a breaker position or valuable wall space. The flexibility of the PanelMaster product line also eliminates delays on job sites caused by custom electronic grade TVSS panels. Only the PanelMaster series by Hubbell provides transient protection to the entire panel in a flexible, easy to install, field serviceable way.

Features	Benefits
Thermal fusing.	Thermal fuse prevents the MOVs from overheating when exposed to high current levels, a patented Hubbell exclusive.
Feed-through connection.	Eliminates connecting leads and provides superior clamping performance.
Hot swappable design.	Allows modules to be replaced without power interruption. Eliminates facility downtime.
Fault-current fusing.	Prevents excessive panel damage caused by internal short circuits or component failure.
LED & audible alarm indicator status.	Provides audible and visual indication of status. Green LED for operational, red LED for module failure.
Sine wave tracking.	Provides uniform clamping throughout the sine wave.

Note: All panel products are UL Listed to Standard 1449.

# Power Quality Products TVSS Products Specifications

## Service Entrance Panel Protection (from page J-4)

### HBL-P320 Series

200 kA Short Circuit Current Rating.

	HBL3P320/D	HBL4P320/D	HBL5P320/D	HBL6P320/D	HBL7P320/D	HBL8P320/D	HBL9P320/D	HBL10P320/D	HBL11P320
<b>Operating Specifications</b>									
Voltage	Single Phase 120/240V AC								
Max Cont. Operating Voltage	3Ø Wye 120/208V AC	3Ø Delta 240V AC	3Ø Delta 240/120V AC	3Ø Wye 220/380V AC	3Ø Wye 277/480V AC	3Ø Delta 480V AC	3Ø Wye 347/600V AC	3Ø Delta 600V AC	
Frequency	50/60/400 Hz								
Maximum Surge Current per Phase	320kA								
Maximum Surge Current per Mode	160kA: L-N, L-G, N-G								
Operating Temperatures	-14° to 140° F (-10° to 60° C)								
Diagnostics	Red & Green Status LEDs, Diagnostic Test Switches, Dry Contacts, Audible Alarm, Optional Surge Counter								
<b>Performance</b>									
UL Clamping Voltage	330V	330V	700V	700/400V	700V	800V	1500V	2000V	2000V
ANSI/IEEE C62.41 Clamping Voltage: Category A3	330V	330V	608V	330/504V	492V	580V	728V	576V	1680V
200A(Ringwave) Category B3	382V	382V	720V	382/600V	572V	684V	1168V	776V	1740V
500A(Ringwave) Category C1	412V	412V	800V	412/652V	640V	772V	1520V	912V	1760V
3000A(Impulse) Normal EMI/RFI									
Rejection	Up to -50dB								
Thermal Fusing	Yes								
Fault Current Fusing	200k AIC Fusing Per Mode								
<b>Mechanical Description</b>		<b>Dimensions</b>		<b>Housing Rating</b>		<b>Product Weight Pounds</b>		<b>Terminal Accommodation</b>	
		6.32"D x 16.45"W x 25.25"H		NEMA 12, Metallic		37		#2 AWG /#6 AWG on units with disconnect	
<b>Product Warranty</b> 10 Year									

## Service Entrance Panel Protection (from page J-5)

### HBL-P160 Series

200 kA Short Circuit Current Rating.

	HBL3P160/D	HBL4P160/D	HBL5P160/D	HBL6P160/D	HBL7P160/D	HBL8P160/D	HBL9P160/D	HBL10P160/D	HBL11P160
<b>Operating Specifications</b>									
Voltage	Single Phase 120/240V AC								
Max Cont. Operating Voltage	3Ø Wye 120/208V AC	3Ø Delta 240V AC	3Ø Delta 240/120V AC	3Ø Wye 220/380V AC	3Ø Wye 277/480V AC	3Ø Delta 480V AC	3Ø Wye 347/600V AC	3Ø Delta 600V AC	
Frequency	50/60/400 Hz								
Maximum Surge Current per Phase	160kA								
Maximum Surge Current per Mode	80kA: L-N, L-G, N-G								
Operating Temperatures	-14° to 140° F (-10° to 60° C)								
Diagnostics	Red & Green Status LEDs, Diagnostic Test Switches, Dry Contacts, Audible Alarm, Optional Surge Counter								
<b>Performance</b>									
UL Clamping Voltage	400V	400V	700V	600/400V	600V	800V	1500V	900V	1700V
ANSI/IEEE C62.41 Clamping Voltage: Category A3	364V	364V	560V	364/588V	564V	600V	1048V	624V	732V
200A(Ringwave) Category B3	480V	480V	592V	480V/792V	720V	772V	1184V	856V	1192V
500A(Ringwave) Category C1	560V	560V	864V	560/864V	832V	960V	1740V	1152V	1980V
3000A(Impulse) Normal EMI/RFI									
Rejection	Up to -50dB								
Thermal Fusing	Yes								
Fault Current Fusing	100k AIC Fusing per mode								
<b>Mechanical Description</b>		<b>Dimensions</b>		<b>Housing Rating</b>		<b>Product Weight Pounds</b>		<b>Terminal Accommodation</b>	
with Disconnect		6.32"D x 16.45"W x 25.25"H		NEMA 12, Metallic		37		#6 AWG	
without Disconnect		4.70"D x 10.50"W x 16.20"H		NEMA 12, Metallic		15		#2 AWG	
<b>Product Warranty</b> 10 Year									

## PanelMaster Series (from page J-6)

### HBL-PM160 Series

20 kA Short Circuit Current Rating.

	HBL3PM160	HBL4PM160	HBL8PM160
<b>Operating Specifications</b>			
Voltage	Single Phase 120/240V AC		
Max Cont. Operating Voltage	150/300	150/300	320/640
Frequency	50/60/400 Hz		
Maximum Surge Current per Phase	160kA		
Maximum Surge Current per Mode	80kA: L-N, L-G, N-G		
Operating Temperatures	-14° to 140° F (-10° to 60° C)		
Diagnostics	Red & Green Status LEDs, Diagnostic Test Switches, Dry Contacts, Audible Alarm, Optional Surge Counter		
<b>Performance</b>			
UL Clamping Voltage	400V	400V	800V
ANSI/IEEE C62.41 Clamping Voltage: Category A3	330V	330V	580V
200A(Ringwave) Category B3	382V	382V	684V
500A(Ringwave) Category C1	412V	412V	772V
3000A(Impulse) Normal EMI/RFI			
Rejection	Up to -50dB		
Thermal Fusing	Yes		
Fault Current Fusing	200k AIC Fusing per mode		
<b>Mechanical Description</b>		<b>Dimensions</b>	
		5.75"D x 20.12"W x 17.5"H	
<b>Housing Rating</b>		<b>Product Weight Pounds</b>	
NEMA 1, Metallic		27	
<b>Terminal Accommodation</b>		#250 MCM	
<b>Product Warranty</b> 10 Year			

