

Shore Power Supply



The BPS series is a family of high performance Shore Power Supply developed according to needs for shipbuilding, berths and ships. It can operate under environment with high level of humidity, heat and corrosion, and provide pure 50Hz and 60Hz power to abusive loads.

With output power up to 2000kVA, the BPS series has output voltage of 440V (L-L) and output frequency of 47~63Hz continuously adjustable and 50/60Hz fixed. Installed in a customized container, it has protection level up to IP54 and overload capability for harsh conditions

Product Features

- Overload Capability: 110% for 1 hour and 150% for 1 minute.
- Equipped with outdoor level container to increase protection level up to IP54 for harsh conditions.
- High input power factory and high efficiency up to 92%.
- Patented power module design with compact size for easier maintenance and high power density.
- Comprehensive protection includes over voltage, over current, over load, input under voltage and over temperature with corresponding error codes.
- Emergency stop button to shut down output immediately.

Output Power

300kVA~2000kVA

Interfaces

Standard **RS-485**

Applications

- Aerospace & Defense
- Shore Power
- Ship Building
- Repair Station

SPECIFICATIONS

BPS-F Series Three-Phase Output (300kVA - 1200kVA)

Model	BPS-F-33300	BPS-F-33400	BPS-F-33500	BPS-F-33600	BPS-F-33800	BPS-F-331000	BPS-F-331200	
INPUT								
Phase	3Ø / 4 Wire + G							
Voltage ^{*1}	220V/380V±15%							
Frequency	50 Hz ± 3Hz · 60Hz ± 3Hz							
Max. Current ^{*2}	629A	839A	1049A	1258A	1678A	2097A	2517A	
Power Factor	≥ 0.85 (Max. Power)							
OUTPUT								
Power	VA	300kVA	400kVA	500kVA	600kVA	800kVA	1000kVA	1200kVA
Phase	3Ø / 3 Wire + G							
Voltage Range	440V ±5V (L-L)							
Voltage Resolution	0.1V							
Voltage Accuracy	0.5% F.S.+4 counts							
Frequency Range	47-63 Hz, 50 Hz, 60 Hz							
Frequency Resolution	0.1Hz							
Frequency Accuracy	±0.02% F.S.							
Max. Current (RMS)	394A	525A	656A	787A	1050A	1312A	1575A	
Line Regulation	≤ 1%							
Load Regulation	≤ 1% (Resistive Load)							
Total Harmonic Distortion(THD)	≤ 3% (Resistive Load)							
Response Time	≤ 2ms							
Crest Factor	≥ 3							
MEASUREMENT								
Voltage Range	0-600.0V							
Voltage Resolution	0.1V							
Voltage Accuracy	0.5% F.S.+4 counts							
Frequency Range	40.0-70.0Hz							
Frequency Resolution	0.01Hz							
Frequency Accuracy	±0.02% F.S.							
Current Range(RMS)	0-9999A							
Current Resolution(RMS)	0.1A							
Current Accuracy(RMS)	0.5% F.S.+4 counts							
Power Range	0-1200kW							
Power Resolution	0.1kW							
Power Accuracy	1% F.S.+6 counts							
GENERAL								
Efficiency	≥ 85% at Max. Power							
HMI	Digital LED Meters							
Overload Capacity	150% of rated current for 1 minute ^{*4} Inrush current capability: 250% of rated current for 2 seconds ^{*5} Output over current protection: 400% of rated current							
Protection	Input Circuit Breakers and Protection Circuitry for OVP, OCP, LVP and OTP							
Remote Interface	RS-485							
Operational Temperature	-10°C ~ 45°C							
Humidity	0~90% (Non condensing)							
Altitude	< 1,500m							
IP Level	Outdoor Model: IP54 Indoor Model: IP20							
Dimensions (H x W x D)	1900 x 1240 x 1150 mm	2000 x 2240 x 1240 mm			2000 x 3450 x 1240 mm			
	74.8 x 48.81 x 45.27 inch	78.74 x 88.18 x 48.81 inch			78.74 x 135.82 x 48.81 inch			
Weight ^{*3}	2800kg	3500kg	4300kg	5200kg	6800kg	8500kg	10500kg	
	6172.9lbs	7716.2lbs	9479.9lbs	11464lbs	14991.4lbs	18739.3lbs	23148.5lbs	

*1 Please contact us for other voltage specification. *2 The rated input voltage is 220V/380V. *3 The size listed excluded container's size *4 all specifications are subject to change without notice.

*4 For every 1-minute of 150% overload operation, the unit needs at least 10-minute interval for the next 150% overload operation.

*5 For every 2-second of 250% overload operation, the unit needs at least 20-second interval for the next 250% overload operation.

SPECIFICATIONS

BPS-V Series Three-Phase Output (300kVA - 2000kVA)

Model	BPS-V-33300	BPS-V-33400	BPS-V-33500	BPS-V-33600	BPS-V-33800	BPS-V-331000	BPS-V-331200	BPS-V-331500	BPS-V-332000	
INPUT										
Phase	3Ø / 4 Wire + G									
Voltage ^{*1}	220V/380V±15%									
Frequency	45-65 Hz									
Max. Current ^{*2}	520A	693A	866A	1040A	1387A	1734A	2080A	2600A	3467A	
Power Factor	≥ 0.95 (Max. Power)									
OUTPUT										
Power	VA	300kVA	400kVA	500kVA	600kVA	800kVA	1000kVA	1200kVA	1500kVA	2000kVA
Phase	3Ø / 4 Wire + G									
Voltage Ranges	440V ±5V (L-L)									
Voltage Resolution	0.1V									
Voltage Accuracy	0.5% F.S.+4 counts									
Frequency Range	50 Hz, 60 Hz									
Frequency Resolution	0.1Hz									
Frequency Accuracy	±0.02% F.S.									
Max. Current (RMS)	394A	525A	656A	787A	1050A	1312A	1575A	1968A	2624A	
Line Regulation	≤ 1%									
Load Regulation	≤ 1% (Resistive Load)									
Total Harmonic Distortion(THD)	≤ 3% (Resistive Load)									
Response Time	≤ 2ms									
Crest Factor	≥ 3									
MEASUREMENT										
Voltage Range	0-600.0V									
Voltage Resolution	0.1V									
Voltage Accuracy	0.5% F.S.+4 counts									
Frequency Range	40.0-70.0Hz									
Frequency Resolution	0.01Hz									
Frequency Accuracy	±0.02% F.S.									
Current Range(RMS)	0-9999A									
Current Resolution(RMS)	0.1A									
Current Accuracy(RMS)	0.5% F.S.+4 counts									
Power Range	0-2000kW									
Power Resolution	0.1kW									
Power Accuracy	1% F.S.+6 counts									
GENERAL										
Efficiency	≥ 92% at Max. Power									
HMI	Pointer Meter									
Overload Capacity	150% of rated current for 1 minute ^{*4} Inrush current capability: 250% of rated current for 2 seconds ^{*5} Output over current protection: 400% of rated current									
Protection	Input Circuit Breakers and Protection Circuitry for Input OVP/LVP, OVP, OCP, RCP and OTP									
Remote Interface	RS-485									
Operational Temperature	-20°C ~ 45°C									
Humidity	0~90% (Non condensing)									
Altitude	< 1,000m									
IP Level	Outdoor Model: IP54 Indoor Model: IP20									
Dimensions (H x W x D)	2280 x 4000 x 850 mm			2280 x 4000 x 1000 mm	2280 x 4800 x 1000 mm			2280 x 6000 x 1200 mm		
	89.76 x 157.48 x 33.46 inch			89.76 x 157.48 x 39.37 inch	89.76 x 188.97 x 39.37 inch			89.76 x 236.22 x 47.24 inch		
Weight ^{*3}	1550kg	2050kg	2500kg	2950kg	3900kg	4900kg	6000kg	7200kg	9600kg	
	3417.2lbs	4519.5lbs	5511.6lbs	6503.6lbs	8598lbs	10802.7lbs	13227.7lbs	15873.3lbs	21164.4lbs	

*1 Please contact us for other voltage specification.

*2 The rated input voltage is 220V/380V.

*3 The size listed excludes container's size

*4 all specifications are subject to change without notice.

*4 For every 1-minute of 150% overload operation, the unit needs at least 10-minute interval for the next 150% overload operation.

*5 For every 2-second of 250% overload operation, the unit needs at least 20-second interval for the next 250% overload operation.

ORDERING INFORMATION :**BPS-F Series Three-Phase Output (300kVA - 1200kVA)**

Model Number	Description
BPS-F-33300	Shore Power Supply (300kVA/440V L-L/47-63Hz Variable, 50Hz, 60Hz)
BPS-F-33400	Shore Power Supply (400kVA/440V L-L/47-63Hz Variable, 50Hz, 60Hz)
BPS-F-33500	Shore Power Supply (500kVA/440V L-L/47-63Hz Variable, 50Hz, 60Hz)
BPS-F-33600	Shore Power Supply (400kVA/440V L-L/47-63Hz Variable, 50Hz, 60Hz)
BPS-F-33800	Shore Power Supply (800kVA/440V L-L/47-63Hz Variable, 50Hz, 60Hz)
BPS-F-331000	Shore Power Supply (1000kVA/440V L-L/47-63Hz Variable, 50Hz, 60Hz)
BPS-F-331200	Shore Power Supply (1200kVA/440V L-L/47-63Hz Variable, 50Hz, 60Hz)

BPS-V Series Three-Phase Output (300kVA - 2000kVA)

Model Number	Description
BPS-V-33300	Shore Power Supply (300kVA/440VL-L/50Hz, 60Hz)
BPS-V-33400	Shore Power Supply (400kVA/440VL-L/50Hz, 60Hz)
BPS-V-33500	Shore Power Supply (500kVA/440VL-L/50Hz, 60Hz)
BPS-V-33600	Shore Power Supply (400kVA/440VL-L/50Hz, 60Hz)
BPS-V-33800	Shore Power Supply (800kVA/440VL-L/50Hz, 60Hz)
BPS-V-331000	Shore Power Supply (1000kVA/440VL-L/50Hz, 60Hz)
BPS-V-331200	Shore Power Supply (1200kVA/440VL-L/50Hz, 60Hz)
BPS-V-331500	Shore Power Supply (1500kVA/440VL-L/50Hz, 60Hz)
BPS-V-332000	Shore Power Supply (2000kVA/440VL-L/50Hz, 60Hz)