

# Powercity GENERATORS

Model: PDG20SS

20 KVA / Single Phase



Powercity generators are designed in conformance with European Standards certified by independent certifying agency the Materials Industrial Research and Technology Center (MIRTEC) with certificate number MC/TH-C-269/08. The principles in design, safety, rating and performance are in accordance with European Standards EN 12601:2001, EN 60204-1:2006, EN 60034-1:2004, EN ISO 12100-1:2003 and EN ISO 12100-2:2003. Generators are designed and built to provide electrical power for stand-by or continuous use. Comes with 2 years or 2,000 run hours limited warranty whichever comes first.

## Features:

- MANUAL or AUTOMATIC starting and stopping capability.
- Digital controller.
- Direct injection diesel engine for fuel efficiency.
- Brushless rotating field generator with class H insulation.
- NEMA 3R enclosure suitable for outdoor use.
- Integral vibration isolators.
- Silent type generator.

## Specifications

Model	PDG20SS		
<b>Alternator</b>			
Make & Model	Powercity TWG-224B		
Frequency	Hz	50	60
Output Rating (KVA)	Prime	16	20
	Standby	17.6	22
Phase	1 - Phase (2 Wires)		
Rated Voltage	V	200-240 / 380-440	
Power Factor	0.8 (Lagging)		
Voltage Regulation	%	Within +/- 1.5	
Excitation	Brushless rotating exciter with Automatic Voltage Regulator (AVR)		
Insulation	Class H		
<b>Engine</b>			
Make & Model	Quanchai N485D		
Type	Vertical inline; water cooled; 4 stroke; direct injected.		
Output Rating	Kw/rpm	15.5/1500	18/1800
No. of cylinders-Bore X Stroke	mm	4 – 85 X 95	
Piston Displacement	L	2.156	
Fuel	ASTM No. 2 Diesel		
Fuel Consumption @ 75% Load	L/h	3.7	4.1
Lube Oil Capacity	L	6	
Coolant Capacity	L	14	
Battery Capacity	V-Ah	12V-80Ah	
Fuel Tank Capacity	L	65	
<b>Unit</b>			
Dimensions	Length mm	1630	
	Width mm	740	
	Height mm	910	
Dry Weight	Kg	800	
<b>Sound Level</b>			
dB @ 7 m		68	70

Note: Due to continuous product improvement, the generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

## Engine:

N485D – 4 cylinder Direct Injection Diesel  
15.5kW@1500 rpm / 18kW@1800 rpm



## Standards:

EN 12601:2001 – Reciprocating internal combustion engine driven generating sets – Safety.

EN 60204-1:2006 – Safety of machinery; electrical equipment of machines – General requirements.

EN 60034-1:2004 – Rotating electrical machines – Rating and performance.

EN ISO 12100-1:2003 – Safety of machinery; basic concepts and general principles for design Part 1.

EN ISO 12100-2:2003 – Safety of machinery; basic concepts and general principles for design Part 2.

Applicable EGSA\* Standards.

\*- Electrical Generating Systems Association

## Application Notes:

**STANDBY RATING:** Standby ratings apply to installations served by a reliable utility source. This rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO 3046-1, BS 5514, AS 2789 and DIN 6271.

**PRIME POWER RATING:** Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve hours. Ratings in accordance with ISO 8528-1, overload power in accordance with ISO 3046-1, BS 5514, AS 2789, and DIN 6271.

## GENERAL GUIDELINES FOR DERATION:

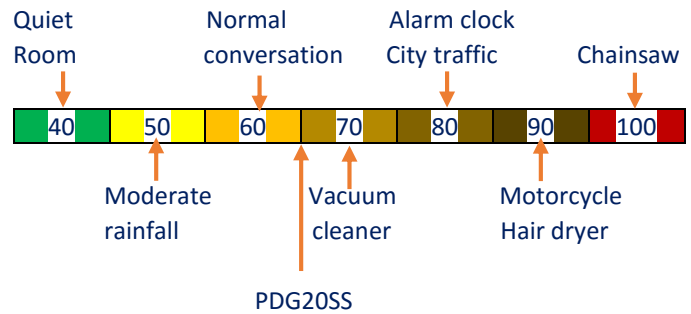
Altitude: Derate 0.5% per 100 meter (328 ft.) elevation above 1000 meter (3279 ft.).

Temperature: Derate 1.0% per 10°C (18°F) temperature above 40°C (104°F).

FUEL: Use clean diesel fuel only. Diesel fuel quality should meet the specifications of ASTM D975 and the Worldwide Fuel Charter.

SOUND LEVEL: Sound level is measured in free field environment (acoustic test chamber) where sound may propagate free from any form of obstruction.

dB Range:



## Quality Assurance:



ISO 9001:2008

Certificate No. U13Q2GZ682452F1M

Manufactured by:

**Powercity Electromechanical & Equipment Co Ltd**  
Fujian, China

Distributed in the Philippines by:

**Powercity Corporation**  
Km. 20, East Service Road, Muntinlupa City  
Metro Manila, Philippines  
Tel. (+632) 869 1991, (+632) 8697520  
Fax. (+632) 8693869  
Email: [contactus@powercity.ph](mailto:contactus@powercity.ph)

Made in China