

Model: PDG20S

20 KVA / 3-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	PDG20S		
Alternator			
Make & Model	Powercity TWG-224B		
Frequency	Hz	50	60
Output Rating	Prime	16	20
(KVA)	Standby	17.6	22
Phase	3	- Phase (4 Wires)	
Rated Voltage	V	200-240 / 380-440	
Power Factor		0.8 (Lagging)	
Voltage	%	Within 1/1 F	
Regulation	70	Within +/- 1.5	
Excitation		Brushless rotating exciter	
		with Automatic Voltage Regulator (AVR)	
Insulation Class H			
Engine Ovenshei NASED			
Make & Model		Quanchai N485D	
Туре		Vertical inline; water	
		cooled; 4 stroke; direct injected.	
Output Pating	Kw/rpm	15.5/1500 18/1800	
Output Rating No. of cylinders-	KW/TPIII	13.3/1300	16/1600
Bore X Stroke	mm	4 – 85 X 95	
Piston			
Displacement	L	2.156	
Fuel		ASTM No. 2 Diesel	
Fuel		7.5111110	1 2 3 10301
Consumption @	L/h	3.7	4.1
75% Load	- /··	0.7	
Lube Oil	L	6	
Capacity	L	6	
Coolant	L	14	
Capacity	L	14	
Battery Capacity	V-Ah	12V-80Ah	
Fuel Tank	L	65	
Capacity	L		
Unit			
	Length mm	1630	
Dimensions	Width mm	740	
	Height mm	910	
Dry Weight	Kg	800	
Sound Level			
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:

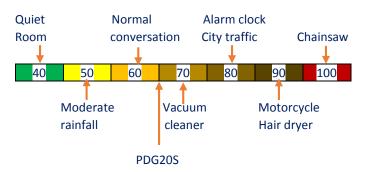
Altitude: Derate 0.5% per 100 meter (328 ft.) elevation above 1000 meter (3279 ft.).

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

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