



PDC425B

Prime Power: 310KW/388KVA Standby Power: 340KW/425KVA Voltage: 400VAC

Powered by Cummins 6ZTAA13-G3 Engine

Genset Performance

230/400VAC	50Hz	0.00E	3 Dhacac /	wirec
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Frequency drop ≤3%

≤0.3% Voltage regulation

The steady state frequency ≤0.5%

The steady state voltage deviation $\leq \pm 1\%$

The transient frequency deviation **≤+10% ≤-15%**

The transient voltage deviation **≤+20% ≤-15%**

Frequency recovery time ≤3S

Voltage recovery time \leq 1S(Voltage \pm 3%)

THF (Telephone Harmonic Factor) <3

<50 TIF (Telephone Influence Factor) Comply to Standard NEMA MG1-22.43

Built-in vibration isolator with high performance on shock absorption.

Standard Configuration

- **Cummins Engine**
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40°C standard ambient temperature (50°C Optional)
- Molded case circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

Optional Items

- Starting batteries
- Fuel tank
- Oil-water separator
- Sensor for low coolant level, low fuel/oil level
- Automatically monitoring & controlling system of city power
- Coolant heater
- Oil heater
- Heat exchanger--Water cooled tower system
- Soundproof canopy
- Trailer
- 20GP or 40HQ container type canopy
- Design and construction of environmental protection
- Engineering for the Genset room

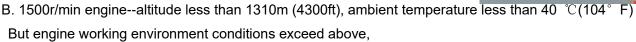


Equipment Instruction



Diesel Engine

- Model:6ZTAA13-G3
- Construction: The enhanced cylinder block has low noise and little vibration.Longer stroke ensure gas burning more fully and increase effective power output with low fuel consumption.
- Advanced 4 air valve construction:more power output, more air combustion, lower fuel consumption.Increase low speed torque has good performance high efficiency
- Fuel system: Rotator high pressure fuel pump, lower fuel consumption, and reduce noise effectively.
- Environment: The engine can work normally under the following conditions without de-rating:
 - A. 1800r/min engine--altitude less than 1500m (5000ft), ambient temperature less than 40 $\,^{\circ}$ C (104 $^{\circ}$ F).



the engine output power will de-rate 4% as altitude increase each 300m(1000ft) at the altitude is higher than 1500m (5000ft),

Also it will de-rate 2% as temperature increase every 11 $^{\circ}$ C(1% de-rating ,when temperature increase each 10 $^{\circ}$ F). in the ambient temperature is higher than 40 $^{\circ}$ C(104 $^{\circ}$ F)



- Optional brands: Stamford / Marathon / Faraday / Engga / Mecc Alt
- Brushless, 4 pole rotating magnetic field, single bearing with protective cover.
- Insulation: H Class.
- IP Class: IP23
- Cooling system
- AC exciter, rotate rectifying
- Rotor and exciter made with high temperature insulating resin, to satify tough environment.
- Rotor dynamic balancing complys for BS5625, class 2.
- Sealed with advanced lubricating grease to prolong life of bearing.



Notes: Above data of alternator comes from Stamford. Specification may alternated without advance notice.



Intelligent Control System



Standard

- 3 phases voltage: Ua, Ub, Uc
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- Oil pressure OP
- Engine speed

- 3 phases current: La, Lb, Lc
- Active power PA
- Power factor PF
- Temperature °C display
- KPa/Psi/Bar display
- Battery voltage V
- Running Hour
- Starting timer:(999999)



Standard Protection

Genset Protection

- Programmable I/O signal
- **Engine Protection**
- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail

Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost

Control System Components

- Manual/auto/stop/start
- Setting button
- Fault status indicators

- Emergency stop
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail
- Over Voltage
- Over frequency
- Under frequency
- Screen menu selection button
- Emergency stop button
- Digital displayer



Communication Interface

(Option)

International standard MODBUS communication protocol RS232/ RS485 is suitable for remote control and monitor; It is easy integrated with SCADA;.

Notes: Above data of controller comes from POWERTEC GC6110. Customized solutions is available as required

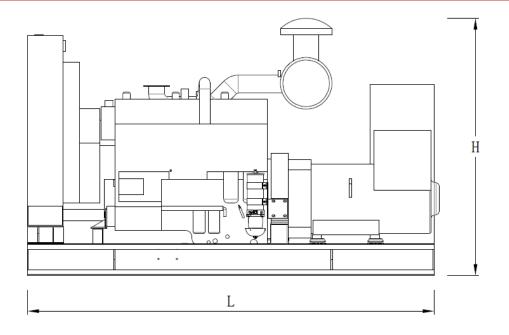
Data sheet of Genset

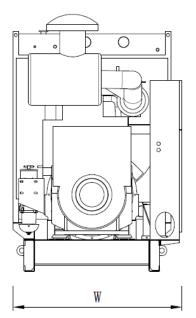


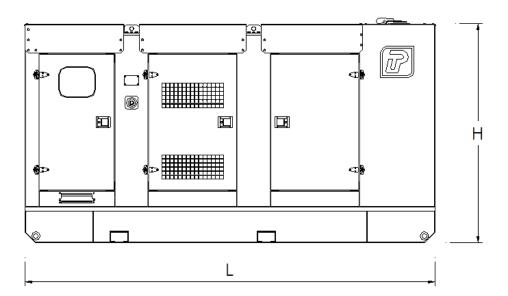
Model	PDC425B					
Prime Rating (kw)	310					
Standby Rating (kw)	340					
Rate voltage(V)	400					
Rate current(A)	559					
Power factor	0.8					
Frequency(Hz)	50					
Engine						
Engine Model	6ZTAA13-G3					
Gross Engine output-Prime (kw)	340					
Gross Engine output-Standby (kw)	380					
Bore * stroke (mm)	130*163					
Cylinders and structure	6 In line					
Displacement(Liter)	13					
Compression Ratio	17:1					
Intake way	Turbo Charge,Air-Air Intercool					
Max intake resistance (KPa)	6.2					
Air intake (m3/h)	1656					
Max exhaust back pressure (KPa)	13					
Exhaust gas flow (m3/h)	4026					
Evhaust temp (°C)	636					
Cooling way	Water Radiator & Fan					
Fan exhaust flow (m3/min)	736					
Coolant capacity (L)	73.1					
Highest water temperature(°C)	102					
Minimum air opening to room (m2)	2.8/2.5					
TI	82-94					
Max oil tamparature (°C)	121					
Lubrication system oil capacity (L)	45.42					
Rate load fuel consumption(L/H)	76.5					
Standard Governor/Class	Electronic					
Alternator						
Rated Voltage(V)	400/230					
Output Way	3 Phases, 4 wires					
Rated power factor	0.8					
Exciter	Brushless, Self-exciter					
Max voltage regulation	±1%					
Phase	3					
Protection class	IP21-23					
Insulation class	Н					
Controller						
Brand	POWERTEC or DEEPSEA					

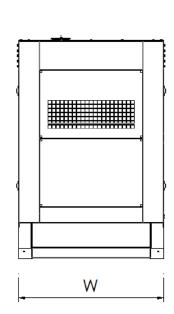
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3215*1415*1911	3256	-
Silent Type	4300*1594*2250	5056	900

Contact Us

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