



### **PDC475B**

Prime Power: 350KW/438KVA Standby Power: 380KW/475KVA Voltage: 400VAC

**Powered by Cummins 6ZTAA13-G4 Engine** 

#### **Genset Performance**

230//00\/&C	50Hz, 0.8PF, 3 Pha	acae /I wirae

■ Frequency drop ≤3%

■ Voltage regulation ≤0.3%

■ 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 ≤1S(Voltage±3%)

■ THF (Telephone Harmonic Factor) <3

■ TIF (Telephone Influence Factor) <50

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
- S470 Soundproof type canopy
- Design and construction of environmental protection
- Engineering for the Genset room

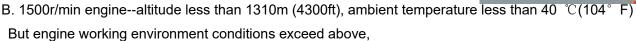


## **Equipment Instruction**



### **Diesel Engine**

- Model:6ZTAA13-G4
- 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

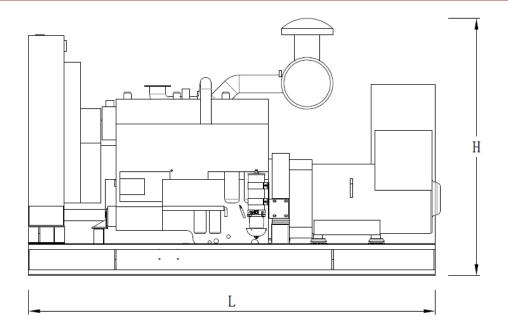
# **Data sheet of Genset**

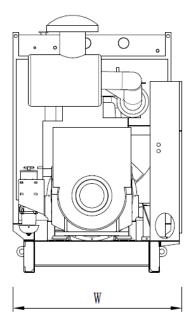


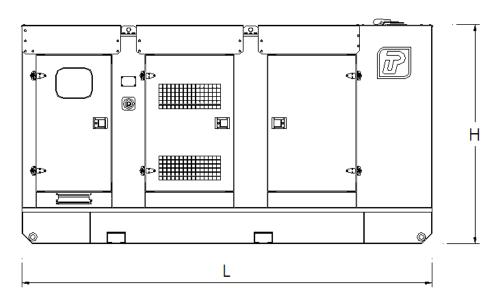
Model	PDC475B					
Prime Rating (kw)	350					
Standby Rating (kw)	380					
Rate voltage(V)	400					
Rate current(A)	631					
Power factor	0.8					
Frequency(Hz)	50					
Engine						
Engine Model	6ZTAA13-G4					
Gross Engine output-Prime (kw)	400					
Gross Engine output-Standby (kw)	415					
Bore * stroke (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)	1728					
Max exhaust back pressure (KPa)	13					
Exhaust gas flow (m3/h)	3743					
Exhaust temp (°C)	668					
Cooling way	Water Radiator & Fan					
Fan exhaust flow (m3/min)	900					
Coolant capacity (L)	73.1					
Highost water temperature(°C)	102					
Minimum air opening to room (m2)	2.8/2.5					
Thermostat range (°C)	82-94					
May ail tamparatura (°C)	121					
Lubrication system oil capacity (L)	45.42					
Rate load fuel consumption(L/H)	91.4					
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					

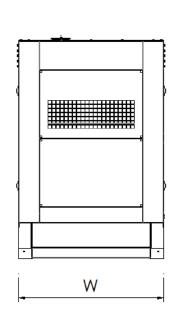
# **Dimension and Weight**











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3215*1472*1911	3585	-
Silent Type	4300*1594*2250	5385	900

## **Contact Us**

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