



PDC400B

Prime Power: 288KW/360KVA Standby Power: 320KW/400KVA Voltage: 400VAC

Powered by Cummins QSZ13-G6 Engine

Genset Performance

- 230/400VAC, 50Hz, 0.8PF, 3 Phases 4 wires
- 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

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

shock absorption.

- 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



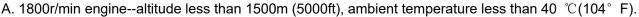
Equipment Instruction

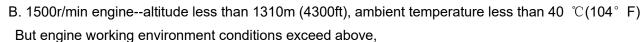


Diesel Engine

■ Model: QSZ13-G6

- Construction: Cummins high pressure common rail fuel system (HPCR)
 realizes multi-point injection, and the throttle responds quickly at
 different speeds. More efficient power output, better fuel economy and
 less noise
- The integrated oil-water pipeline replaces the traditional hose to eliminate the hidden trouble of leakage.
- Enhanced cooling and lubrication functions effectively extend the service life of the engine
- The two-stage dual fuel filter ensures balanced particulate dispersion and maximizes the life of the fuel filter life, protect the main components of the fuel system
- Emission standards: Comply to China Tier III emission standards
- Environment: The engine can work normally under the following conditions without de-rating:





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.





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

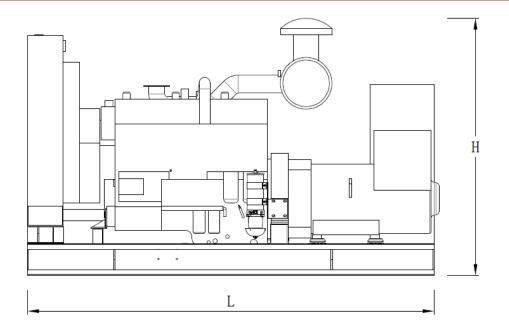
Data sheet of Genset

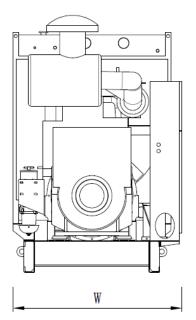


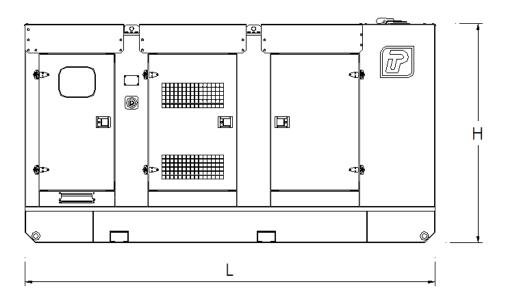
Genset				
Model	PDC400B			
Prime Rating (kw)	288			
Standby Rating (kw)	320			
Rate voltage(V)	400			
Rate current(A)	520			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	QSZ13-G6			
Gross Engine output-Prime (kw)	328			
Gross Engine output-Standby (kw)	375			
Bore * stroke (mm)				
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)	1638			
Max exhaust back pressure (KPa)	13			
Exhaust gas flow (m3/h)	2082			
	497			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	690			
Coolant capacity (L)	73			
Llighest water temperature (°C)	107			
Minimum air opening to room (m2)	2.8/2.5			
Thermostationae (°C)	82-94			
May ail tamparature (°C)	121			
Lubrication system oil capacity (L)	75.33			
Rate load fuel consumption(L/H)	81.6			
Standard Governor/Class	Electronically Controlled High Voltage Common Rail			
Alternator				
Rated Voltage(V)	400/230			
Output Way	3 Phases, 4 wires			
Rated power factor	0.8			
Exciter	Brushless, Self-exciter			
Max voltage regulation Phase	±1% 3			
Protection class	IP21-23			
Insulation class	H			
Controller				
Brand	POWERTEC or DEEPSEA			

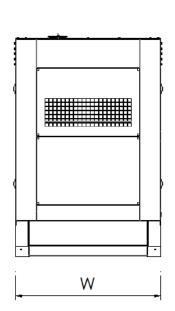
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3094*1443*1911	3385	-
Silent Type	4300*1594*2250	5185	900

Contact Us

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