

PDC275A

Prime Power: 200KW/250KVA

Standby Power: 220KW/275KVA

Voltage: 400V

Powered by Cummins 6LTAA8.9-G3 Engine

Genset Performance

- 230/400AC, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop $\leq 3\%$
- Voltage regulation $\leq 0.3\%$
- The steady state frequency $\leq 0.5\%$
- The steady state voltage deviation $\leq \pm 1\%$
- The transient frequency deviation $\leq +10\% \leq -15\%$
- The transient voltage deviation $\leq +20\% \leq -15\%$
- Frequency recovery time $\leq 3S$
- Voltage recovery time $\leq 1S(\text{Voltage} \pm 3\%)$
- 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)
- 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
- Design and construction of environmental protection engineering for the Genset room



Diesel Engine

- Model: **6LTAA8.9-G3**
- Description: Cummins 6LTAA8.9G engine is a mechanical fuel system that provides heavy-duty performance. Electronic controller controls to keep engine speed more stable. 24-valve and larger flow injector design, one of the highest power-to-weight ratio products in its class;
- 4-valve structure: 4 valves per cylinder, improving power through faster response and fuel economy, and high work efficiency;
- Fuel System: Bosch Type P7100 mechanical fuel injection pump features high injection pressure, optimizing engine performance and establishing an unparalleled reputation for reliability;
- Electronic governor control unit: Strengthening the electronic governor control unit can optimize engine speed stability and reliability;
- Electronic fuel shut-off valve: Increases engine safety in mechanical fuel systems;
- Turbocharger: Holset HE400 and HE500 non-wastegate turbochargers are used to improve power and fuel economy and reduce smoke and noise levels;
- Coolpac integrated design: The product comes with a cooling pack and air filter kit, providing a complete power package. Every component is developed specifically for rigorously tested G-Drive products, ensuring efficient performance, durability and reliability.



Alternator

- 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 satisfy tough environment.
- Rotor dynamic balancing complies for BS5625, class 2.
- Sealed with advanced lubricating grease to prolong life of bearing.



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
- Emergency stop

Engine Protection

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail

Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost
- Over Voltage
- Over frequency
- Under frequency

Control System Components

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

Genset

Model	PDC275A
Prime Rating (kw)	200
Standby Rating (kw)	220
Rate voltage(V)	400
Rate current(A)	361
Power factor	0.8
Frequency(Hz)	50

Engine

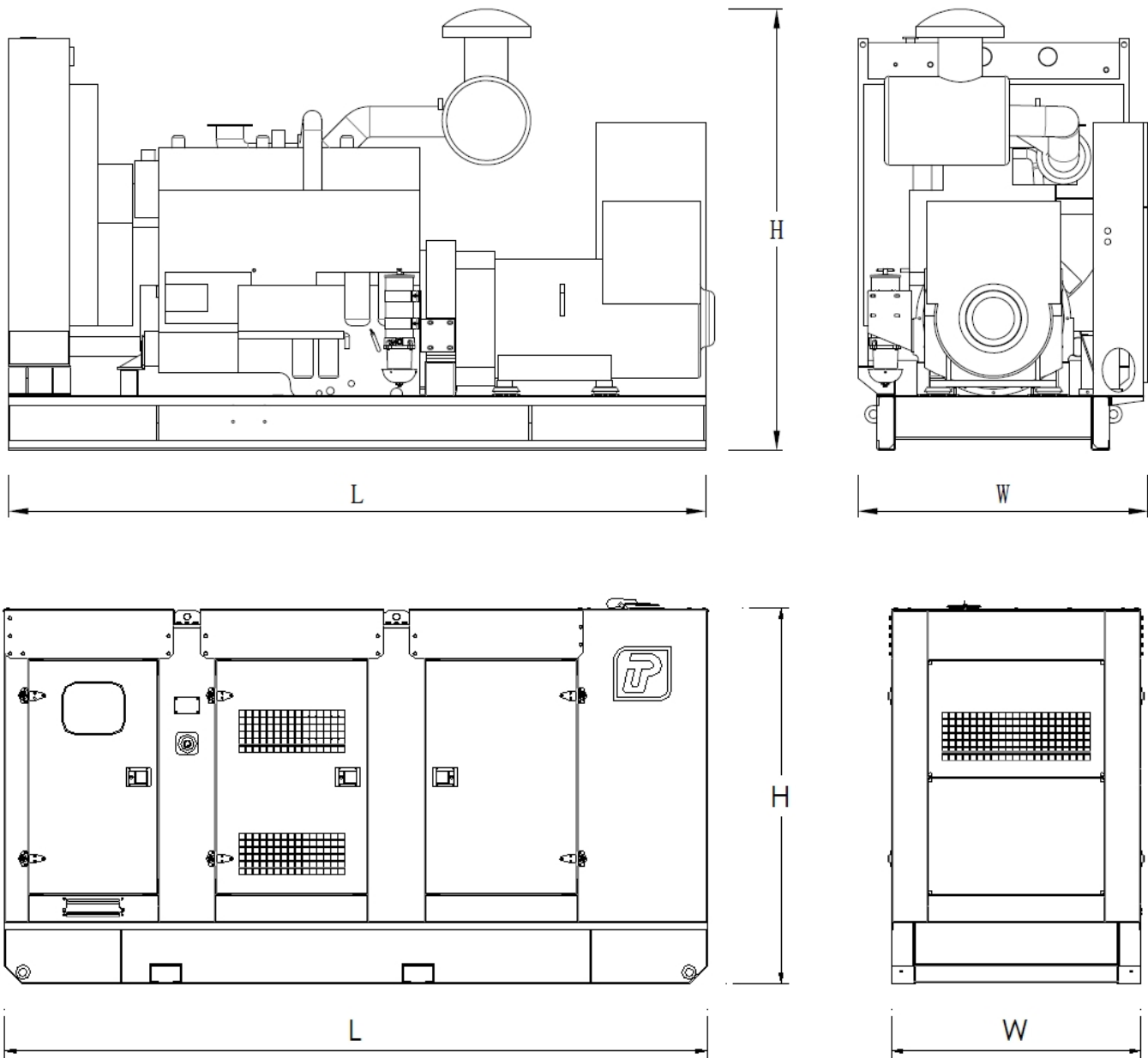
Engine Model	6LTAA8.9-G3
Gross Engine output-Prime (kw)	230
Gross Engine output-Standby (kw)	250
Bore * stroke (mm)	114*145
Cylinders and structure	6 In line
Displacement(Liter)	8.9
Compression Ratio	16.6:1
Intake way	Turbocharged and Charge Air Cooled
Max intake resistance (KPa)	6.2
Air intake (m3/h)	778
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	2102
Exhaust temp (°C)	542
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	460
Coolant capacity (L)	41
Highest water temperature(°C)	104
Minimum air opening to room (m2)	2.4/2.0
Thermostat range (°C)	82-95
Max oil temperature (°C)	121
Lubrication system oil capacity (L)	27.6
Rate load fuel consumption(L/H)	54
Standard Governor/Class	Electronic

Alternator

Rated Voltage(V)	230/400
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	H

Controller

Brand	POWERTEC
-------	----------



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	2731*1067*1528	1952	430
Silent Type	3500*1245*2052	3212	550

Contact Us

Powertec Generator System Inc.

Add: Danshui Yanna Industry Zone, Huiyang, Huizhou, Guangdong, China

Tel: +86 752-3911119 / 3911118

Fax: +86 752-3911110

Web: www.powertec.com.cn

Email: powertec@powertec.com.cn