POWERTEC
Powertec Generator System Inc.

PDC210A

Prime Power: 150KW/188KVA Standby Power: 165KW/206KVA Voltage: 400V

Powered by Cummins QSB6.7-G32 Engine

Genset Performance

- 230/400V，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 ≤±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.

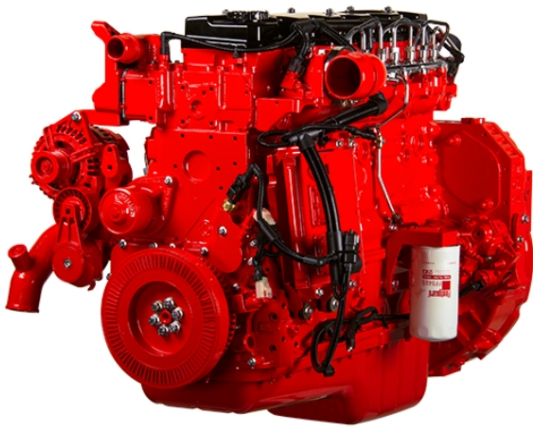
Standard Configuration

- Cummins Engine
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40℃ standard ambient temperature （50℃ 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:**QSB6.7-G32**
- Structure: Use forged steel camshaft and crankshaft, high-strength cylinder design, multiple parts cast on the cylinder, high rigi7dity, strong high-pressure resistance, good reliability, and longer service life;
- Integrated design: The cylinder block and cylinder head adopt integrated design to prevent water and oil leakage from the engine.occurrence, the parts are about 40% less than other similar engines, and the failure rate is greatly reduced;
- Advanced design and sophisticated manufacturing: adaptable to various harsh working conditions, strong in high-intensity and heavy-load peration capabilities;
- Fuel system: Three-stage fuel filtration ensures a balanced level of particle dispersion,protects the main components of the fuel system, and maximizes engine life;
- Lubrication system: The cylinder bore adopts a platform grid honing design, and the perfect geometric structure effectively prevents oil leakage. Advanced technologies such as new piston ring components and sealing gasket curling molding are used to reduce oil loss;
- The electronic control system can intelligently switch working modes according to the environment and operating conditions, and has self-diagnosis, alarm and remote monitoring functions;
- The engine may be operated at ：
  1500 RPM up to 2000 m and 104 ° F (40 ℃) without power deration.
  For sustained operation above these conditions, derate by 4% per 300 m, and 3% per 10 ℃.

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 satify tough environment.
- Rotor dynamic balancing complys for BS5625, class 2.5
- 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 ℃ display
- Oil pressure OP
- Engine speed
- 3 phases current: La, Lb, Lc
- Active power PA
- Power factor PF
- Temperature ℃ 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

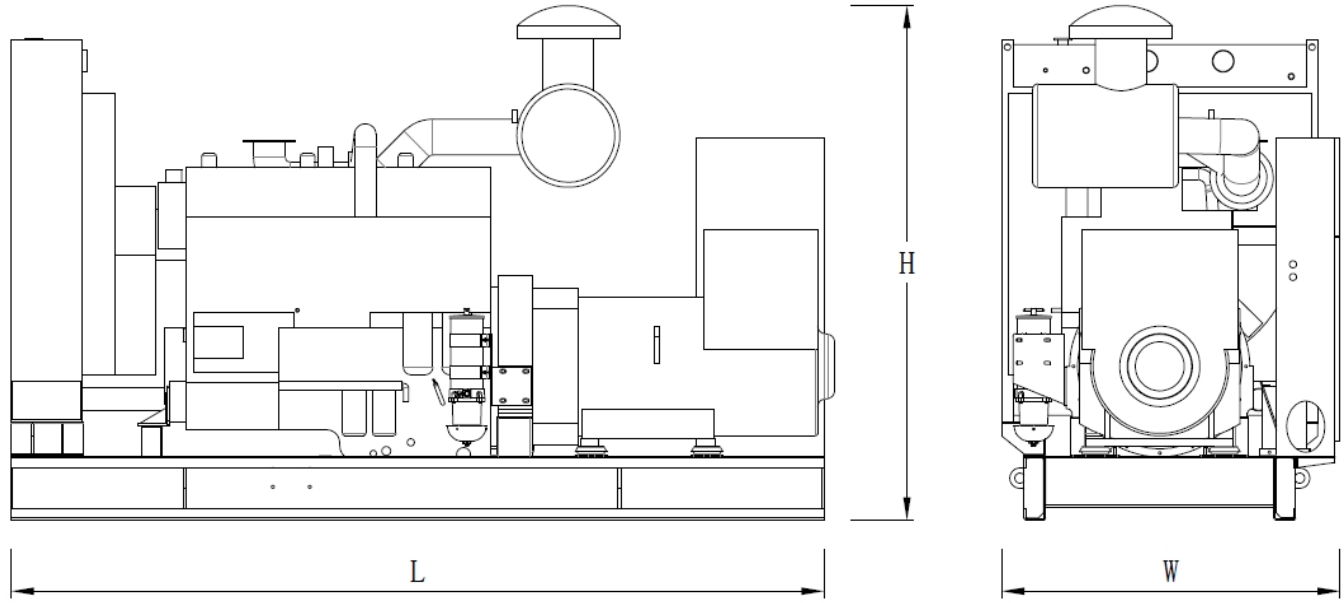
Control System Components

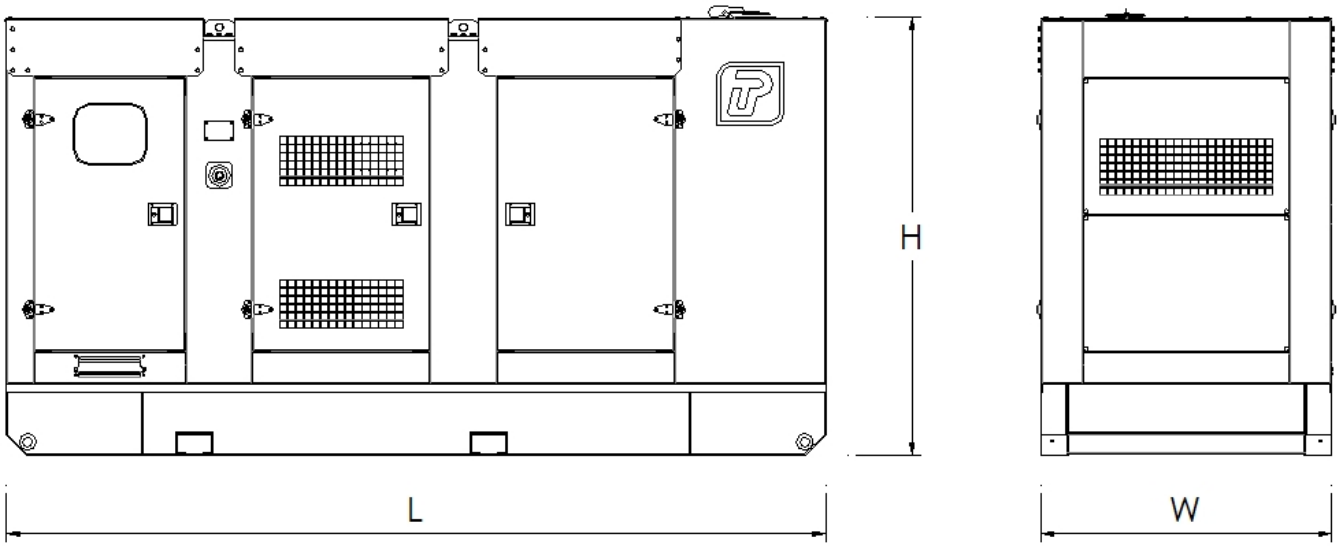
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer

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	PDC210A
Prime Rating (kw)	150
Standby Rating (kw)	165
Rate current(A)	271
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	QSB6.7-G32
Gross Engine output-Prime (kw)	173
Gross Engine output-Standby (kw)	190
Bore * stroke (mm)	107*124
Cylinders and structure	6 In line
Displacement(Liter)	6.7
Compression Ratio	18.5:1
Intake way	Turbocharged
Max intake resistance (KPa)	5
Air intake (m3/h)	645
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	663
Exhaust temp (℃)	535
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	240
Coolant capacity (L)	30
Highest water temperature(℃)	99
Minimum air opening to room (m2)	1.5/1.3
Thermostat range (℃)	82-95
Max oil temperature (℃)	124
Lubrication system oil capacity (L)	19.5
Rate load fuel consumption(L/H)	40.4
Standard Governor/Class	Electronically Controlled High Voltage Common Rail
Emission	MEP StageIII
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	2579*1038*1657	1734	315
Silent Type	3950*1400*2115	3134	750

Contact Us

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