

## PCC500B

Prime Power: 360KW/450KVA

Standby Power: 400KW/500KVA

Voltage: 400V

Powered by Cummins QSK19-G14 Engine

### Genset Performance

- 230/400V, 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

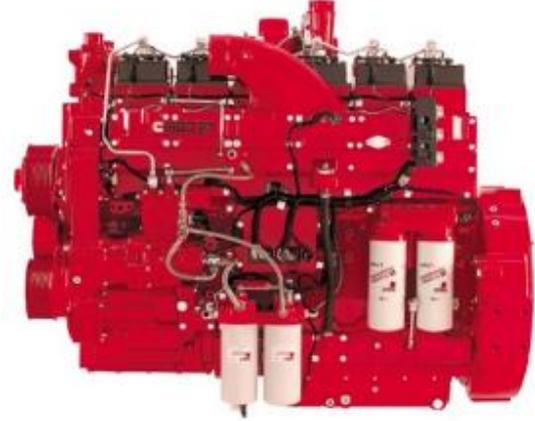
- Cummins Engine
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40°C standard ambient temperature (50°C Optional)
- Circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

### 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: QSK19-G14**
- **Structure:** Replaceable wet cylinder liner, good heat dissipation effect, easy to replace; all model parts have strong versatility, high degree of serialization, and easy maintenance; both the cylinder block and cylinder head adopt built-in pressure lubrication oil passages, with compact structure and easy to troubleshoot Low rate.
- **Intake and exhaust:** The efficient Holset exhaust gas supercharger further improves combustion; the pressure-type pulse exhaust pipe can make full use of exhaust gas energy and improve engine efficiency; intercooling technology ensures better fuel economy and emissions.
- **Cooling system:** forced water cooling by gear centrifugal water pump, large flow water channel design, good cooling effect; spin-on water filter and special DCA additive can effectively prevent rust and cavitation, control coolant acidity and remove impurities.
- **Fuel system:** Using the world's leading high-pressure common rail fuel system and fully electronic control module, ultra-high fuel injection pressure.
- **Lubricating oil system:** pre-lubrication system, Centriguard centrifugal filter and CENTINEL continuous oil renewal system, two-stage combined Fleetguard oil filter, which can obtain a longer maintenance cycle and reduce the engine startup failure rate.
- **Emissions compliance:**  
The improved combustion chamber shape allows the engine to achieve excellent emission levels without the need for post-processing, and has passed China's non-road stage three emission certification.



## 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 complys for BS5625, class 2.
- Sealed with advanced lubricating grease to prolong life of bearing.



## Standard

- 3 phases voltage:  $U_a, U_b, U_c$
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- Oil pressure OP
- Engine speed
- 3 phases current:  $I_a, I_b, I_c$
- 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	PCC500B
Prime Rating (kw)	360
Standby Rating (kw)	400
Rate voltage(V)	400
Rate current(A)	650
Power factor	0.8
Frequency(Hz)	50

## Engine

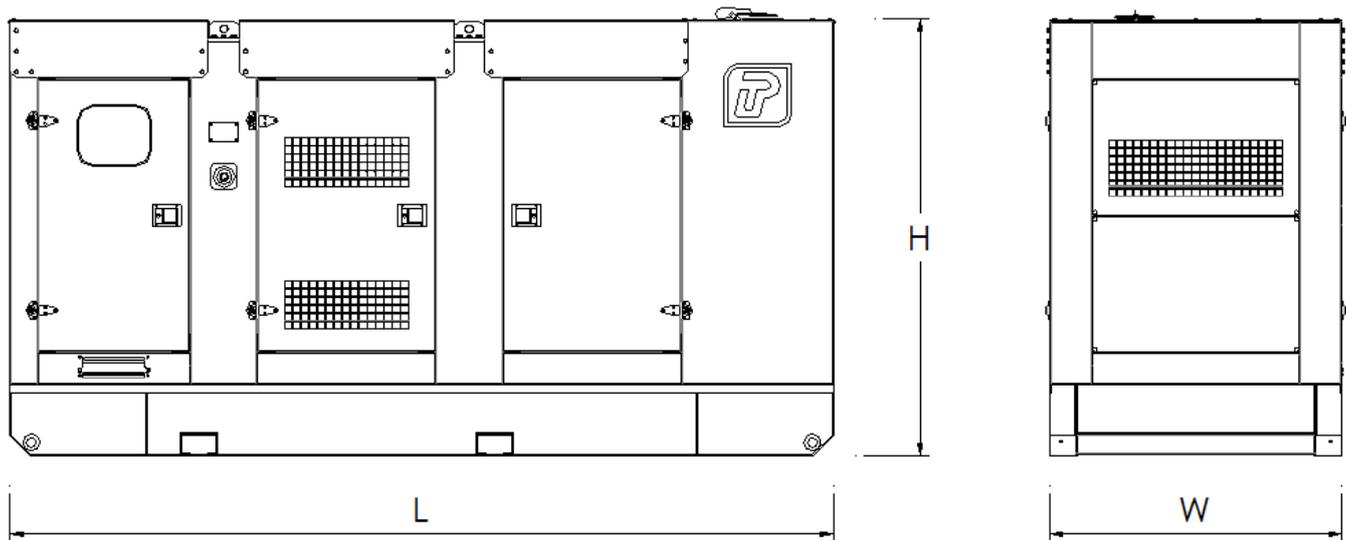
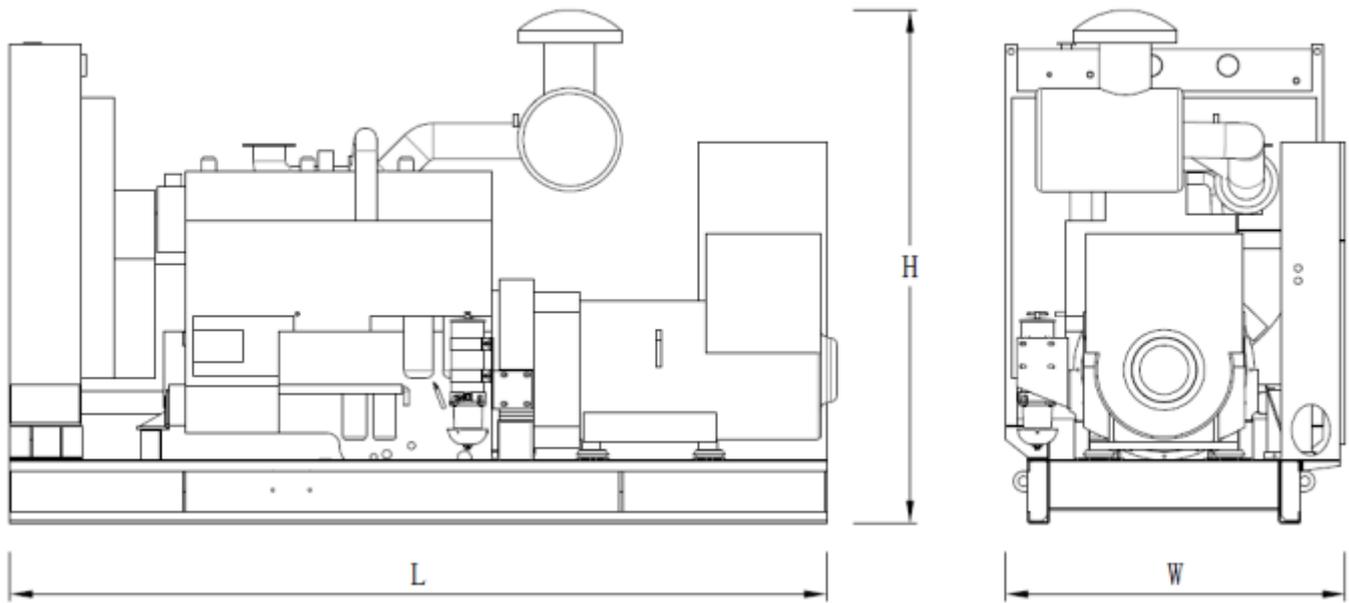
Engine Model	QSK19-G14
Gross Engine output-Prime (kw)	402
Gross Engine output-Standby (kw)	447
Bore * stroke (mm)	159*159
Cylinders and structure	6 In line
Displacement(Liter)	18.9
Compression Ratio	15.8:1
Intake way	Turbocharged and Charge Air Cooled
Max intake resistance (KPa)	6.2
Air intake (m3/h)	2174
Max exhaust back pressure (KPa)	/
Exhaust gas flow (m3/h)	5465
Exhaust temp (°C)	483
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	960
Coolant capacity (L)	99
Highest water temperature(°C)	96
Minimum air opening to room (m2)	3.3/2.7
Thermostat range (°C)	83-95
Max oil temperature (°C)	121
Lubrication system oil capacity (L)	83
Rate load fuel consumption(L/H)	99.7
Standard Governor/Class	CELECT
Emission Certification	China Tier 3

## 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
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Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3300*1560*2018	3745	-
Silent Type	4700*1700*2450	5695	1100

**Contact Us**

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