

# PCC1650B

**Prime Power: 1100KW/1375KVA**

**Standby Power: 1320KW/1650KVA**

**Voltage: 400V**

**Powered by Cummins KTA50-G8 Engine**

## Genset Performance

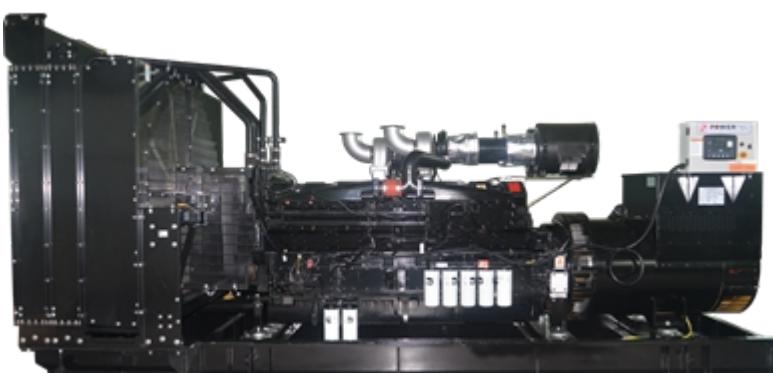
- 230/400V, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop  $\leq 3\%$
- Voltage regulation  $\leq 0.3\%$
- The steady state frequency  $\leq 0.5\%$
- The steady state voltage deviation  $\leq \pm 1\%$
- The transient frequency deviation  $\leq +10\% \leq -15\%$
- The transient voltage deviation  $\leq +20\% \leq -15\%$
- Frequency recovery time  $\leq 3S$
- Voltage recovery time  $\leq 1S$  (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)
- 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
- Trailer
- 20GP or 40HQ container type canopy
- Design and construction of environmental protection engineering for the Genset room



## Diesel Engine

- Model: **KTA50-G8**
- Construction: replaceable wet type cylinder block has excellent radiation. Mature standard spare parts commonly apply to other engine in this series. Cylinder block and head will have no fault with the designment of internal oil passage and compact structure
- Cooling system: Adopt gear centrifugal water pump to cool down water temperature. With large flow channel designmeng ,it has good cooling performance;
- Fuel system: Cummins patented technology (PT) fuel system optimizes combustion and reduces emission;
- The engine may be operated at :  
1800 RPM up to 5000 ft. (1500 m) and 104° F (40 °C) without power deration.  
1500 RPM up to 5000 ft. (1500 m) and 104 ° F (40 °C) without power deration.  
For sustained operation above these conditions, derate by 4% per 1,000 ft.(300 m), and 1% per 10 ° F (2% per 11 °C).



## 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.
- Sealed with advanced lubricating grease to prolong life of bearing.



## Standard

- 3 phases voltage: U<sub>a</sub>, U<sub>b</sub>, U<sub>c</sub>
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- Oil pressure OP
- Engine speed
- 3 phases current: I<sub>a</sub>, I<sub>b</sub>, I<sub>c</sub>
- 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 display



## 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	PCC1650B
Prime Rating (kw)	1100
Standby Rating (kw)	1320
Rate voltage(V)	400
Rate current(A)	1985
Power factor	0.8
Frequency(Hz)	50

## Engine

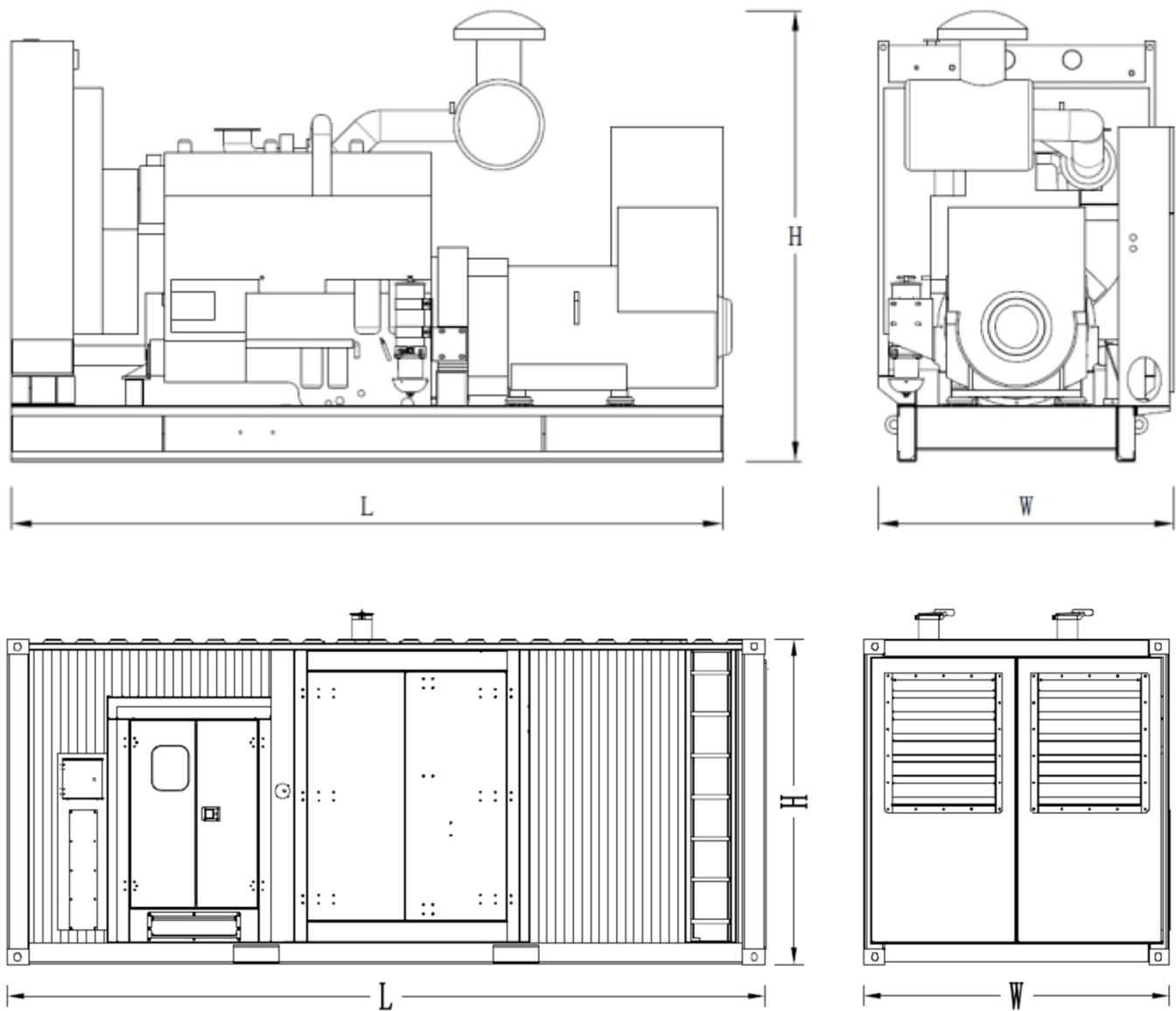
Engine Model	KTA50-G8
Gross Engine output-Prime (kw)	1200
Gross Engine output-Standby (kw)	1429
Bore * stroke (mm)	159*159
Cylinders and structure	16-Cylinder ; 60° Vee
Displacement(Liter)	50.3
Compression Ratio	14.9:1
Intake way	Turbocharged/Water-Air intercooler
Max intake resistance (KPa)	6.23
Air intake (m3/h)	5400
Max exhaust back pressure (KPa)	6.7
Exhaust gas flow (m3/h)	13842
Exhaust temp (°C)	485
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	1680
Coolant capacity (L)	373
Highest water temperature(°C)	96
Minimum air opening to room (m2)	7.2/6.0
Thermostat range (°C)	82-93
Max oil temperature (°C)	121
Lubrication system oil capacity (L)	204
Rate load fuel consumption(L/H)	289
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 GC6110
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Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	5841*2138*2525	10000	-
Silent Type	12192*2438*2896	16800	2000

**Contact Us**

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