

## PCC790B

**Prime Power: 570KW/713KVA**

**Standby Power: 630KW/788KVA**

**Voltage: 400V**

**Powered by Cummins KTA38-G1 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)
- Circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

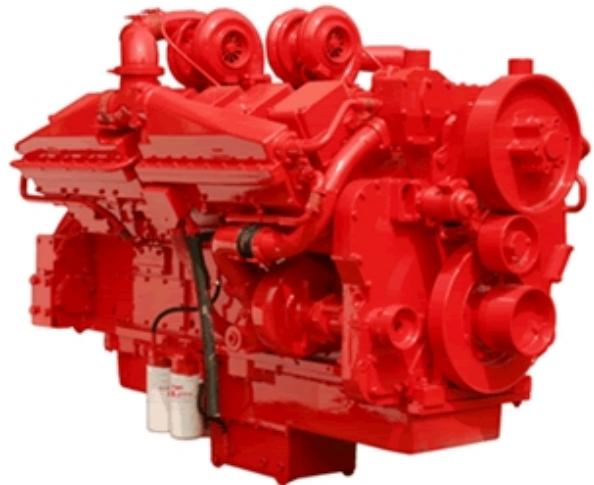
### Optional Items

- 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: **KTA38-G1**
- 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. (1525 m) and 104° F (40 °C) without power deration.  
1500 RPM up to 5000 ft. (1525 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>
- 3 phases current: I<sub>a</sub>, I<sub>b</sub>, I<sub>c</sub>
- Frequency F1
- Active power PA
- Apparent power PR
- Power factor PF
- Temperature °C display
- KPa/Psi/Bar display
- Coolant temperature WT
- Battery voltage V
- Temperature °C display
- Oil pressure OP
- Running Hour
- Engine speed
- Starting timer:(999999)



## Standard Protection

### Genset Protection

- Programmable I/O signal
- Emergency stop

### Engine Protection

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

### Alternator Protection

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

### Control System Components

- Manual/auto/stop/start
- Screen menu selection button
- Setting button
- Emergency stop button
- Fault status indicators
- 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	PCC790B
Prime Rating (kw)	570
Standby Rating (kw)	630
Rate voltage(V)	400
Rate current(A)	1028
Power factor	0.8
Frequency(Hz)	50

## Engine

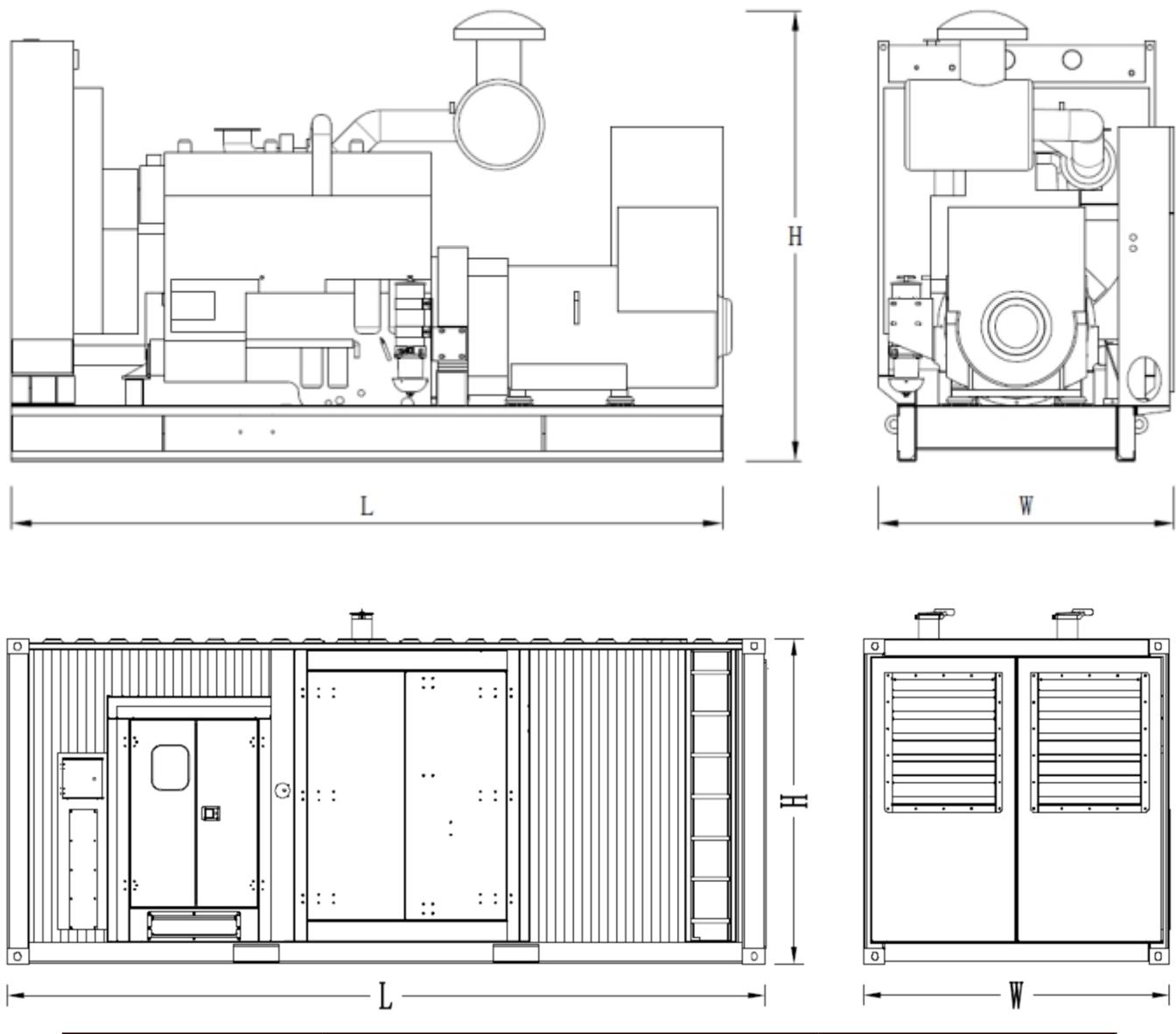
Engine Model	KTA38-G1
Gross Engine output-Prime (kw)	634
Gross Engine output-Standby (kw)	701
Bore * stroke (mm)	159*159
Cylinders and structure	12 Cylind, 60°Vee
Displacement(Liter)	38
Compression Ratio	14.5:1
Intake way	Turbocharged/Water-Air intercooler
Max intake resistance (KPa)	6.23
Air intake (m3/h)	2887
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	8122
Exhaust temp (°C)	538
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	1140
Coolant capacity (L)	303
Highest water temperature(°C)	96
Minimum air opening to room (m2)	4.8/4.0
Thermostat range (°C)	82-93
Max oil temperature (°C)	121
Lubrication system oil capacity (L)	135
Rate load fuel consumption(L/H)	162.8
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
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Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
<b>Open Type</b>	4250*1770*2513	6400	—
<b>Silent Type</b>	6058*2438*2591	10600	1500

**Contact Us**

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