

PCC690B

Prime Power: 500KW/625KVA

Standby Power: 550KW/688KVA

Voltage: 400V

Powered by Cummins KTAA19-G6A 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
- Soundproof canopy
- Trailer
- Design and construction of environmental protection engineering for the Genset room



Diesel Engine

- Model: **KTAA19-G6A**
- 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 design of internal oil passage and compact structure
- Cooling system: Adopt gear centrifugal water pump to cool down water temperature. With large flow channel design, 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 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: U_a, U_b, U_c
- 3 phases current: I_a, I_b, I_c
- Frequency F1
- Active power PA
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- KPa/Psi/Bar display
- Oil pressure OP
- Battery voltage V
- Engine speed
- Running Hour
- 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	PCC690B
Prime Rating (kw)	500
Standby Rating (kw)	550
Rate voltage(V)	400
Rate current(A)	902
Power factor	0.8
Frequency(Hz)	50

Engine

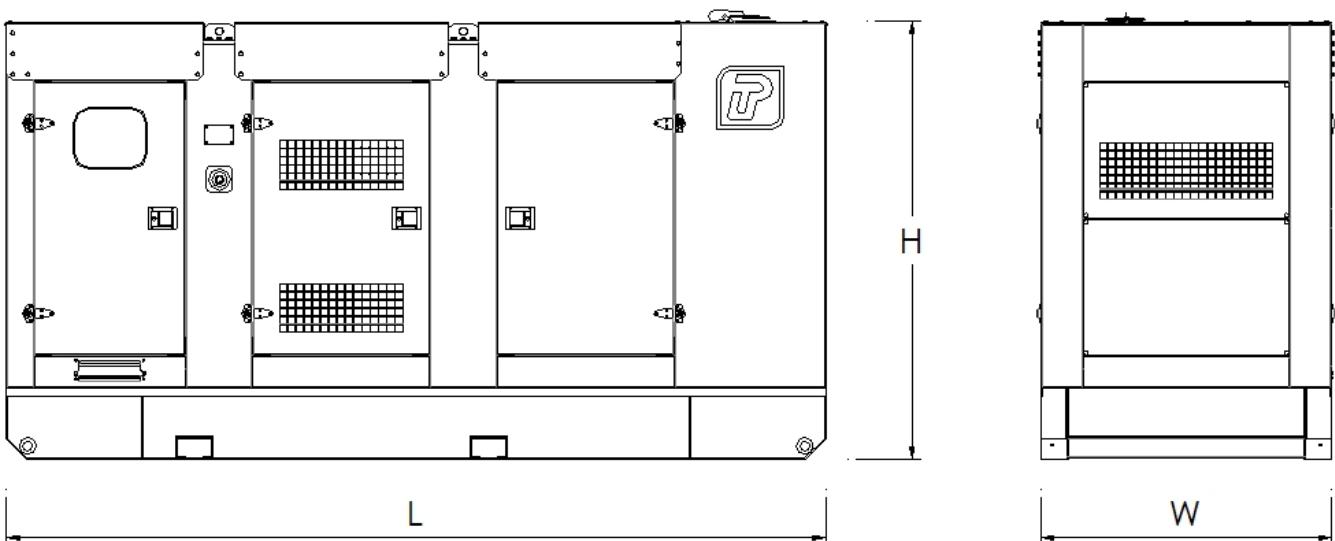
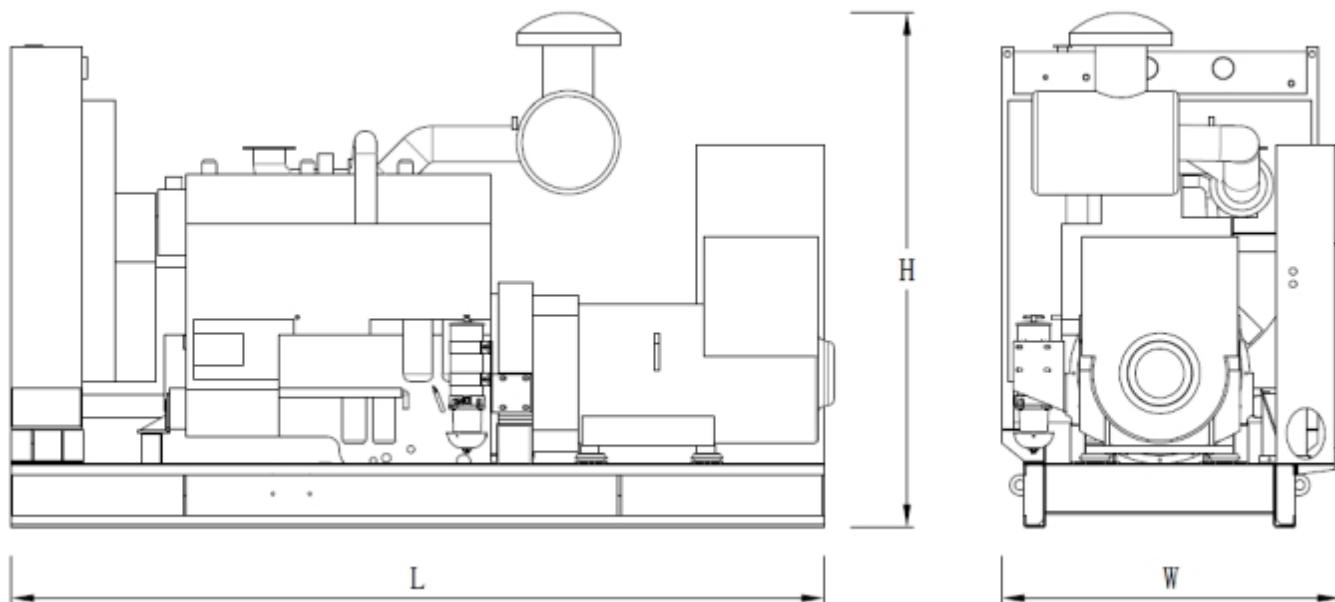
Engine Model	KTAA19-G6A
Gross Engine output-Prime (kw)	-
Gross Engine output-Standby (kw)	610
Bore * stroke (mm)	159*159
Cylinders and structure	6 In line
Displacement(Liter)	19
Compression Ratio	13.9:1
Intake way	Turbocharged/Air-to-Air Cooled
Max intake resistance (KPa)	6.23
Air intake (m3/h)	3060
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	8921
Exhaust temp (°C)	446
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	960
Coolant capacity (L)	118.5
Highest water temperature(°C)	96
Minimum air opening to room (m2)	3.3/2.7
Thermostat range (°C)	82-93
Max oil temperature (°C)	121
Lubrication system oil capacity (L)	50
Rate load fuel consumption(L/H)	158
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	3688*1550*2096	4056	-
Silent Type	4700*1700*2450	6006	1100

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