



PCC650B

Prime Power: 440KW/550KVA Standby Power: 484KW/605KVA Voltage: 400V

Powered by Cummins KTAA19-G6 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 $\leq \pm 1\%$
- The transient frequency deviation ≤+10% ≤-15%
- The transient voltage deviation ≤+20% ≤-15%
- Frequency recovery time
- Voltage recovery time ≤1S(Voltage ±3%)

≤3S

- 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



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Equipment Instruction



Diesel Engine

- Model: KTAA19-G6
- 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 $^{\circ}$ C) without power deration. 1500 RPM up to 5000 ft. (1500 m) and 104 $^{\circ}$ F (40 $^{\circ}$ C) without power deration. For sustained operation above these conditions, derate by 4% per 1,000 ft.(300 m), and 1% per 10 $^{\circ}$ F (2% per 11 $^{\circ}$ C).



- 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.



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Intelligent Control System



Standard

- 3 phases voltage: Ua, Ub, Uc
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature [°]C 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

Engine Protection

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail

Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost

Control System Components

- Manual/auto/stop/start
- Setting button
- Fault status indicators

- Emergency stop
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail
- Over Voltage
- Over frequency
- Under frequency
- 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;.

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Data sheet of Genset



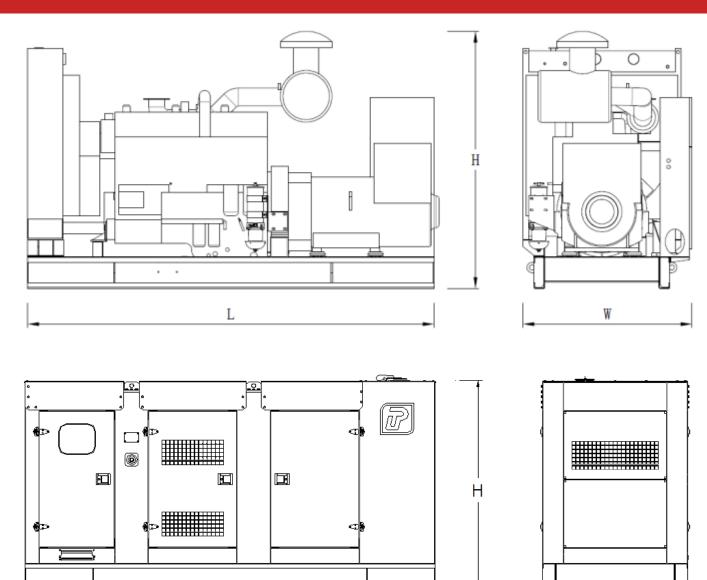
Genset				
Model	PCC650B			
Prime Rating (kw)	460			
Standby Rating (kw)	520			
Rate voltage(V)	400			
Rate current(A)	830			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	KTAA19-G6			
Gross Engine output-Prime (kw)	520			
Gross Engine output-Standby (kw)	570			
Bore * stroke (mm)	159*159			
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)	2243			
Max exhaust back pressure (KPa)	10			
Exhaust gas flow (m3/h)	6696			
Exhaust temp (°C)	433			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	960			
Coolant capacity (L)	118.5			
Highest water temperature(℃)	96			
Minimum air opening to room (m2)	3.0/2.5			
Thermostat range (°C)	82-93			
Max oil temperature (°C)	121			
Lubrication system oil capacity (L)	50			
Rate load fuel consumption(L/H)	134			
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	Н			
Controller				
Brand	POWERTEC			

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Dimension and Weight



W



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3550*1550*2084	4000	-
Silent Type	4700*1700*2450	5950	1100

Contact Us

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