



PCC1500B

Prime Power: 1100KW/1375KVA Standby Power: 1200KW/1500KVA Voltage: 400VAC

≤3%

Powered by Cummins QSK38-G19 Engine

Genset Performance

- 230/400VAC, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop
- 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 ≤3S
- Voltage recovery time ≤1S(Voltage ±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
- Soundproof canopy
- Trailer
- 20GP or 40HQ container type canopy
- Design and construction of environmental protection
- Engineering for the Genset room

Equipment Instruction



Diesel Engine

- Model: Cummins QSK38-G19
- 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;
- Environment: The engine can work normally under the following conditions without de-rating:
- A. 1800r/min engine--altitude less than 1500m (5000ft), ambient temperature less than 40 °C (104° F).
- B. 1500r/min engine--altitude less than 1310m (4300ft), ambient temperature less than 40 $\,^{\circ}$ C (104 $^{\circ}$ F) But engine working environment conditions exceed above,

the engine output power will de-rate 4% as altitude increase each 300m(1000ft) at the altitude is higher than 1500m (5000ft),

Also it will de-rate 2% as temperature increase every 11 $^{\circ}$ C(1% de-rating ,when temperature increase each 10 $^{\circ}$ F). in the ambient temperature is higher than 40 $^{\circ}$ C(104 $^{\circ}$ F)



- 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.



Notes: Above data of alternator comes from Stamford. Specification may alternated without advance notice.





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 [°]C 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;.

Notes: Above data of controller comes from POWERTEC GC6110. Customized solutions is available as required

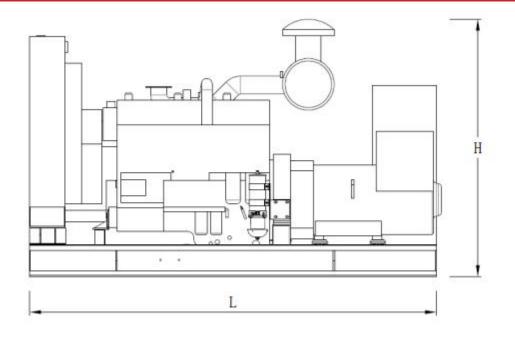
Data sheet of Genset

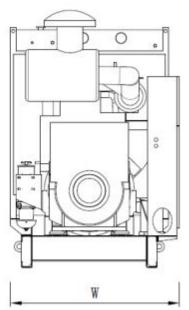


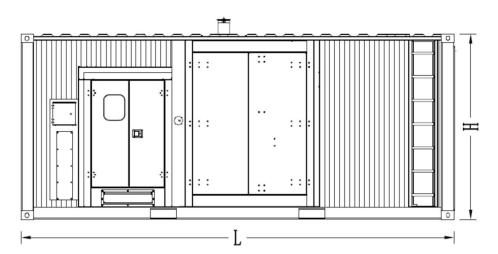
 Genset				
Model	PCC1500B			
Prime Rating (kw)	1100			
Standby Rating (kw)	1200			
Rate voltage(V)	400			
Rate current(A)	1985			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	QSK38-G19			
Gross Engine output-Prime (kw)	1107			
Gross Engine output-Standby (kw)	1224			
Bore * stroke (mm)	159*159			
Cylinders and structure	6 In line			
Displacement(Liter)	37.7			
Compression Ratio	15:1			
Intake way	Turbocharged/Air-Air intercooler			
Max intake resistance (KPa)	6.2			
Air intake (m3/h)	5443			
Max exhaust back pressure (KPa)	7			
Exhaust gas flow (m3/h)	13572			
Exhaust temp (℃)	478			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	1242			
Coolant capacity (L)	349			
Highest water temperature(℃)	104			
Minimum air opening to room (m2)	8.0/7.5			
Thermostat range (℃) 82-94				
Max oil temperature ($^{\circ}$) 121				
Lubrication system oil capacity (L)	170			
Rate load fuel consumption(L/H)	271			
Standard Governor/Class	Electronic			
Alternator				
Rated Voltage(V)	400/230			
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	ss H			
Controller				
Brand	POWERTEC GC6110			

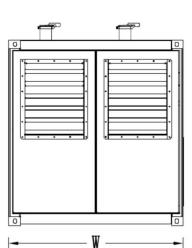
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	5236*2000*2397	9403	-
Silent Type	6058*2438*2591	13203	1500

Contact Us

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