POWERTEC
Powertec Generator System Inc.

PCC1500B

Prime Power: 1080KW/1350KVA Standby Power:1200KW/1500KVA Voltage: 400V

Powered by Cummins QSK38-G19 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 ≤±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℃ standard ambient temperature （50℃ Optional）
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

Optional Items

- Starting batteries
- Fuel tank
- Circuit Breaker(3 P)
- 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

Diesel Engine

- Model: **QSK38-G19**
- Structure: Replaceable wet cylinder liner, good heat dissipation effect, easy to replace; all model parts have strong versatility, high degree of serialization, and easy maintenance; both the cylinder block and cylinder head adopt built-in pressure lubrication oil passages, with compact structure and easy to troubleshoot Low rate.。

- Cooling system: forced water cooling by gear centrifugal water pump, large flow water channel design, good cooling effect; spin-on water filter and special DCA additive can effectively prevent rust and cavitation, control coolant acidity and remove impurities.
- Fuel system: Using the world's leading high-pressure common rail fuel system and fully electronic control module, ultra-high fuel injection pressure。
- Lubricating oil system: pre-lubrication system, Centriguard centrifugal filter and CENTINEL continuous oil renewal system, two-stage combined Fleetguard oil filter, which can obtain a longer maintenance cycle and reduce the engine startup failure rate。
- Emissions compliance：
  The improved combustion chamber shape allows the engine to achieve excellent emission levels without the need for post-processing, and has passed China's non-road stage three emission certification。
- The engine may be operated at ：
  1500 RPM up to 2300 ft. (700 m) and 104 ° F (40 ℃) without power deration.
  For sustained operation above these conditions, derate by 0.7% per 1,000 ft.(305 m), and23.6% per 18 ° F (23.6% per 10 ℃).

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 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.

Standard

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

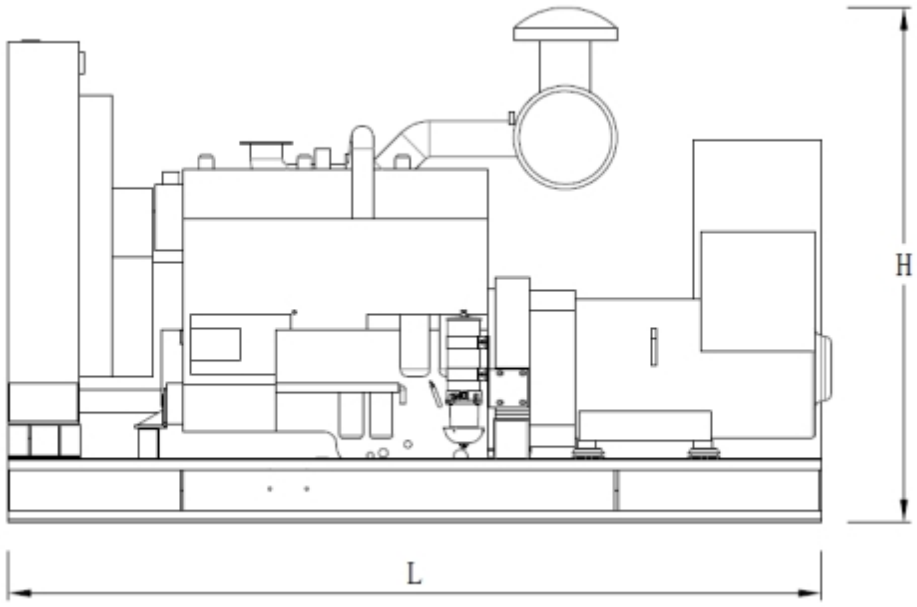
Control System Components

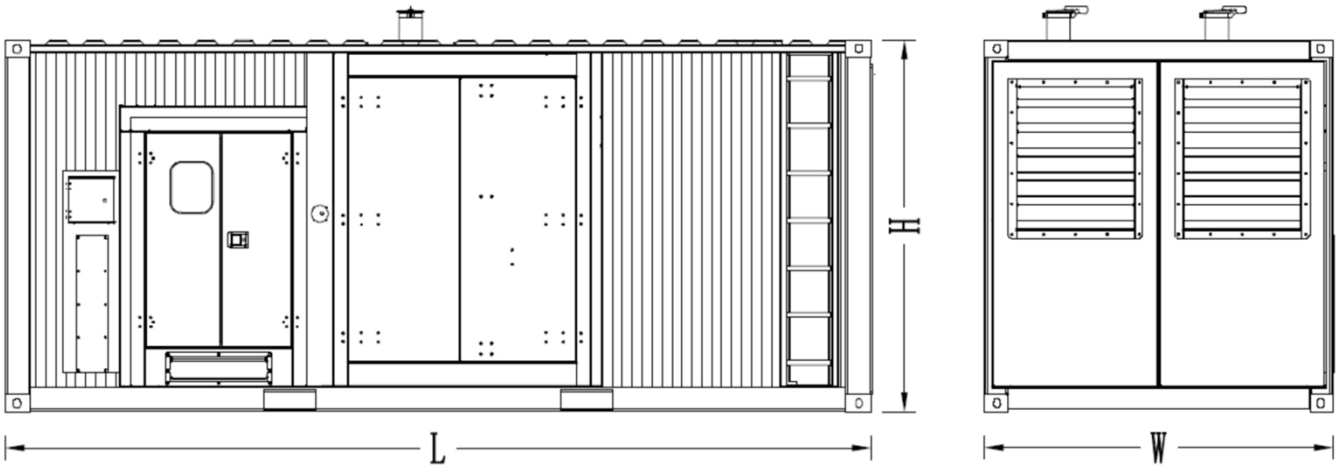
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer

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	PCC1500B
Prime Rating (kw)	1080
Standby Rating (kw)	1200
Rate voltage(V)	400
Rate current(A)	1949
Frequency(Hz)	50
Engine	
Engine Model	QSK38-G19
Gross Engine output-Prime (kw)	1183
Gross Engine output-Standby (kw)	1333
Bore * stroke (mm)	159*159
Cylinders and structure	12 Cylinder ; Vee
Displacement(Liter)	37.7
Compression Ratio	15:1
Intake way	Turbocharged and Low Temp Aftercooled
Max intake resistance (KPa)	6.2
Air intake (m3/h)	5619.6
Max exhaust back pressure (KPa)	7
Exhaust gas flow (m3/h)	13870.8
Exhaust temp (℃)	470
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	1800
Coolant capacity (L)	310
Highest water temperature(℃)	104
Minimum air opening to room (m2)	7.1/5.9
Thermostat range (℃)	82-94
Max oil temperature (℃)	120
Lubrication system oil capacity (L)	170.3
Rate load fuel consumption(L/H)	288
Standard Governor/Class	CELECT
Emission Certification	Provide non-road China III emission reports
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	5100*2435*2259	9500	/
Silent Type	/	/	/

Contact Us

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