

Model: PCC550B

Prime Power: 400KW/500KVA Standby Power: 440KW/550KVA Voltage: 400VAC

Powered by Cummins QSK19-G16 Engine

Genset Performance

- ◆ 230/400VAC, 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 $\leq +10\%$ $\leq -7\%$
- ◆ The transient voltage deviation $\leq +20\%$ $\leq -15\%$
- ◆ Frequency recovery time $\leq 3S$
- ◆ Voltage recovery time $\leq 1S(\text{Voltage} \pm 3\%)$
- ◆ 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

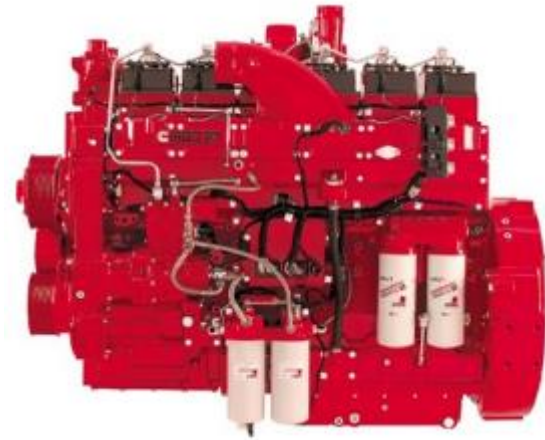
- ◆ Cummins Engine
- ◆ Brushless synchronous alternator
- ◆ POWERTEC intelligent controller
- ◆ 40°C standard ambient temperature (50°C Optional)
- ◆ Molded case circuit breaker (3P)
- ◆ Float battery charger
- ◆ Battery connect wire
- ◆ Steel base frame
- ◆ Silencer, bellows, exhaust bend
- ◆ Manual 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
- ◆ Trailers
- ◆ 20GP or 40HQ container type canopy

柴油发动机性能描述

- ◆ **Model: Cummins QSK19-G16**
- ◆ **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.
- ◆ **Intake and exhaust:** The efficient Holset exhaust gas supercharger further improves combustion; the pressure-type pulse exhaust pipe can make full use of exhaust gas energy and improve engine efficiency; intercooling technology ensures better fuel economy and emissions.
- ◆ **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.



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 complys for BS5625, class 2.5
- ◆ Sealed with advanced lubricating grease to prolong life of bearing



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

Standard detection

- ◆ 3 phases voltage: U_a, U_b, U_c
- ◆ Frequency F1
- ◆ Apparent power PR
- ◆ Coolant temperature WT
- ◆ Oil pressure OP
- ◆ Engine speed
- ◆ Running Hour
- ◆ Starting timer:(999999)
- ◆ 3 phases current: I_a, I_b, I_c
- ◆ Active power PA
- ◆ Power factor PF
- ◆ Temperature $^{\circ}C$ display
- ◆ KPa/Psi/Bar display
- ◆ Battery voltage V



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
- ◆ Voltage signal lost

Control System Components

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

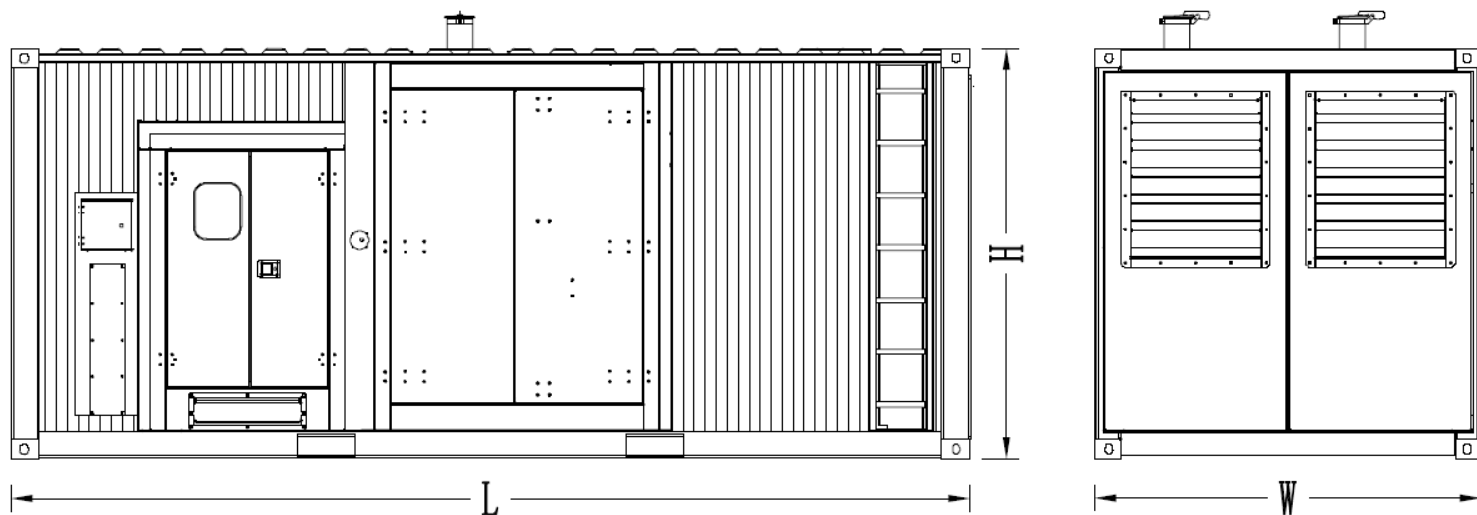
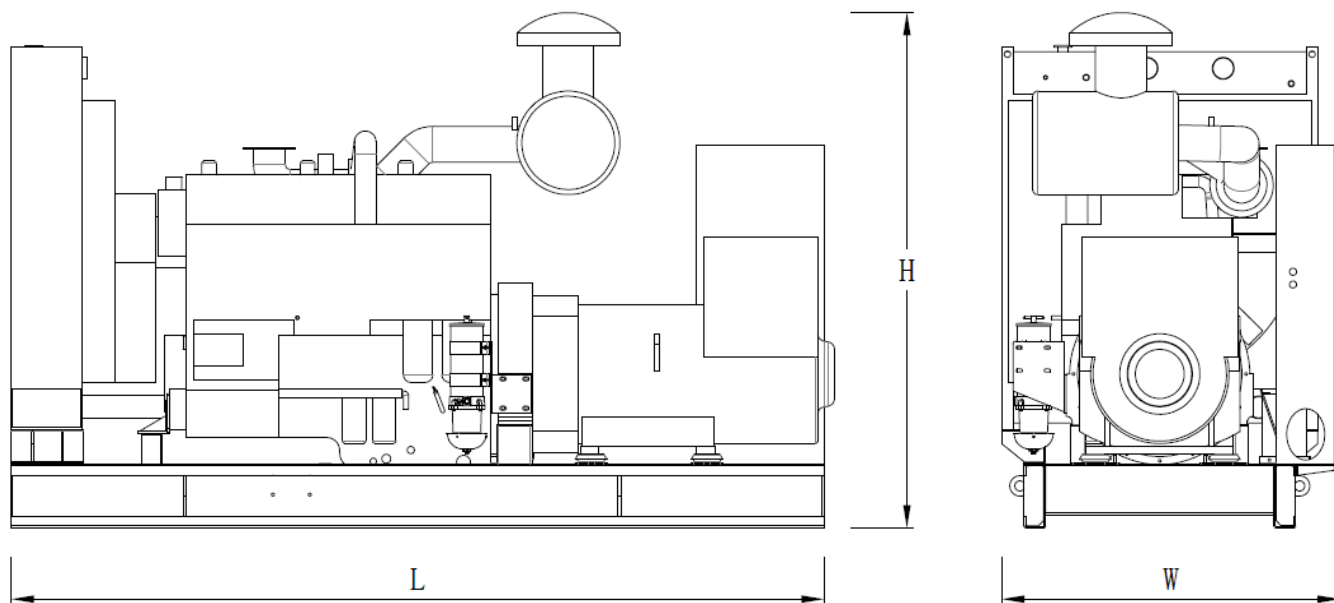


Communication Interface (Option)

- ◆ International standard MODBUS communication protocol RS232/ RS485 is suitable for remote control and monitor; It is easy integrated with SCADA;

Notes: Above data of controller comes from POWERTEC GC7110.2. Customized solutions is available as required !

	Model	PCC550B
Genset	Prime Power (kw)	400
	Standby Power (kw)	440
	Rate current(A)	722
	Frequency(Hz)	50
Engine	Engine Model	QSK19-G16
	Gross Engine output-Prime (kw)	445
	Gross Engine output-Standby (kw)	493
	Bore * stroke (mm)	159*159
	Cylinders and structure	6 In line
	Displacement(Liter)	18.9
	Compression Ratio	14.3:1
	Intake way	Turbocharged and Charge Air Cooled
	Max intake resistance (KPa)	6.2
	Intake Air Flow (m3/h)	2419
	Max exhaust back pressure (KPa)	6.8
	Exhaust gas flow (m3/h)	5872
	Exhaust Gas Temperature (°C)	466
	Cooling way	Water Radiator & Fan
	Fan exhaust flow (m3/min)	960
	Coolant capacity (L)	99
	Maximum Top Tank Temperature(°C)	96
	Minimum air opening to room (m2)	3.0/2.5
	Standard Thermostat (Modulating) Range (°C)	83-95
	Maximum Allowable Oil Temperature (°C)	121
	Lubrication system oil capacity (L)	84
Rate load fuel consumption(L/H)	112	
Standard Governor/Class	CELECT	
Emission Certification	NRMM 3	
Alternator	Generator models that meet common power requirements	Marathon MP-400-4 Stamford HCI 544C
	Generator models that meet backup power requirements	Marathon MP-480-4 Engga EG315-400N3 Stamford HCI 544D Faraday FD5M1-4
	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	H	
Controller	Brand	POWERTEC GC7110.2



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3400*1560*2018	4000	-
Silent Type	6058*2438*2896	8200	1500

Note: The above data are for reference only, the specific dimensions are subject to actual measurements!

Contact Us

Powertec Generator System Co 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