



PYC550B

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

Powered by Yuchai YC6T660-D31 Engine

Genset Performance

_	230/400VAC	COL 1-		0 DL 1 .	!
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■ 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 ≤3S

■ Voltage recovery time ≤1S(Voltage±3%)

■ THF (Telephone Harmonic Factor) <3

TIF (Telephone Influence Factor) <50
 Comply to Standard NEMA MG1-22.43

Standard equipped with ambient temperature 40℃

Connecting radiator

Built-in vibration isolator with high performance on shock absorption.

Standard Configuration

- Guangxi Yuchai 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
- Silent type/Trailer
- Standardized container
- Design and construction of environmental protection; engineering for the Genset room.



Equipment Instruction



Diesel Engine

Model: PYC550B-YC6T660-D31

 Construction: Construction: High strength cylinder block, alloy forged steel crankshaft, alloy steel connecting rod and internal cooling oil pipe piston make the engine more

durable, lighter and compact than other products.

Intake: Charge inter-cooling

 Four valves + pressurized intercooling technology, sufficient air intake, full combustion and low fuel consumption.

- It adopts electronic control unit combined pump, ECU control, smooth operation and good performance in speed regulation.
- Using high precision paper filter element.
- Adopting 24V standard electrical system.
- The parts have good universality and high serialization, one cylinder with one lid structure, to reduce comprehensive maintenance cost.
- The YC6TD series engine is a product developed independently according to the advanced technology of large engines at home and abroad. With four valves, supercharged intercooler and electronic controlled monomer pump, optimized and verified by advanced combustion development technology of Yuchai, it has the characteristics of energy saving, environmental protection, high reliability, strong loading capacity and good maintainability.



1800r/min engine--altitude less than 1000 m, ambient temperature less than 40 $\,^\circ\!\mathrm{C}$ 1500r/min engine--altitude less than 1000 m, ambient temperature less than 40 $\,^\circ\!\mathrm{C}$

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
- The stator winding is impregnated and the surface is covered with moisture-proof epoxy insulating paint.
- Rotor and exciter made with high temperature insulating resin, to satify tough environment.
- Rotor dynamic balancing complys with BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.





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

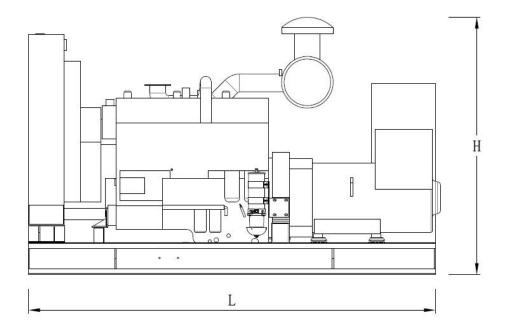
Data sheet of Genset

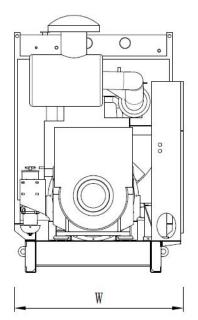


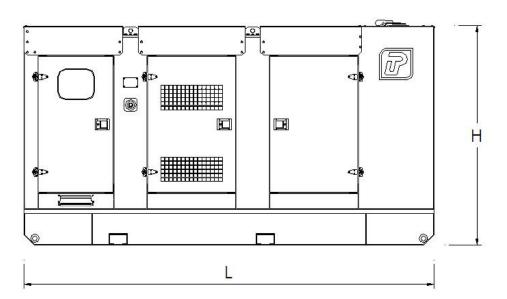
Model	PYC550B				
Prime Rating (kw)	400				
Standby Rating (kw)	440				
Rate voltage(V)	400				
Rate current(A)	722				
Power factor	0.8				
Frequency(Hz)	50				
Engine					
Engine Model	YC6T660-D31				
Gross Engine output-Prime (kw)	441				
Gross Engine output-Standby (kw)	485				
Bore * stroke (mm)	145*165				
Cylinders and structure	6 In line				
Displacement(Liter)	16.35				
Compression Ratio	15:1				
Intake way	Supercharge/Air-Air intercooler				
Max intake resistance (KPa)	5				
Air intake (m3/h)	2470				
Max exhaust back pressure (KPa)	10				
Exhaust gas flow (m3/h)	7050				
Exhaust temp (℃)	580				
Cooling way	Water Radiator & Fan				
Fan exhaust flow (m3/min)	698				
Coolant capacity (L)	90				
Highest water temperature(℃)	95				
Minimum air opening to room (m2)	3.5/3.0				
Thermostat range (℃)	75-85				
Max oil temperature (℃)	115				
Lubrication system oil capacity (L)	52				
Rate load fuel consumption(L/H)	101.2				
Standard Governor/Class	Electronic				
Altern	ator				
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	Н				
Controller					
Brand	POWERTEC or DEEPSEA				

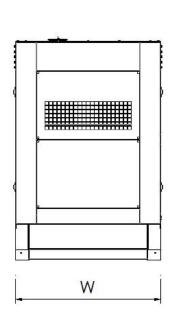
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3428*1398*1754	3679	-
Silent Type	4700*1700*2450	5629	1000

Contact Us

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