

PYC500B

Prime Power: 360KW/450KVA

Standby Power: 400KW/500KVA

Voltage: 400V

Powered by Yuchai YC6T600L-D22 Engine

Genset Performance

- 230/400V, 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 $\leq +10\% \leq -15\%$
- 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
- Standard equipped with ambient temperature 40°C
Connecting radiator
- Built-in vibration isolator with high performance on
shock absorption.
- Product standards: (1) GB/T 2820-2022 / ISO8528:2018
(2) GB/T 4712-2008 (3) YD/T 502-2020 (4) YD/T 1051-2018

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

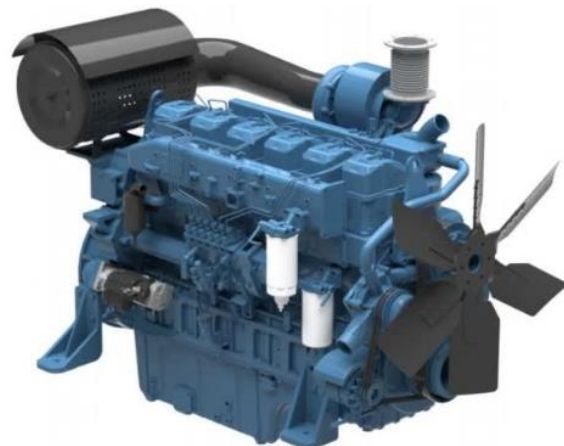
Standard Configuration

- Guangxi Yuchai 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
- Bottom fuel tank
- Manual book and files



Diesel Engine

- Model: YC6T600L-D22
- YC6T series engines are independently developed by combining the advanced technology of large engines at home and abroad. Products. It adopts four valves, supercharged medium cooling and other configurations, and is developed by Yuchai's advanced combustion technology. The optimization and verification of the technology have the characteristics of high energy saving reliability, strong loading ability and good maintainability ;
- Structure: made of high-strength alloy cast iron, with better rigidity, less vibration and noise; Wet cylinder liner, easy to maintain.
- Four-valve+supercharged intercooling technology, sufficient air intake, full combustion and low fuel consumption.;
- It features mechanical pumps with electronic speed control, ensuring stable operation, good transient response, and strong loading capacity .
- Cylinder block with a mesh reinforcement structure, cylinder head featuring a dual-layer water flow design, crankshaft and connecting rods made of high-strength alloys – all of these ensure high reliability .
- Parts have good universality, high serialization, one cylinder and one cover structure, and low comprehensive maintenance cost.



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 satisfy tough environment.
- Rotor dynamic balancing complies for BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.



Standard Meters

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



Standard Protection Function

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

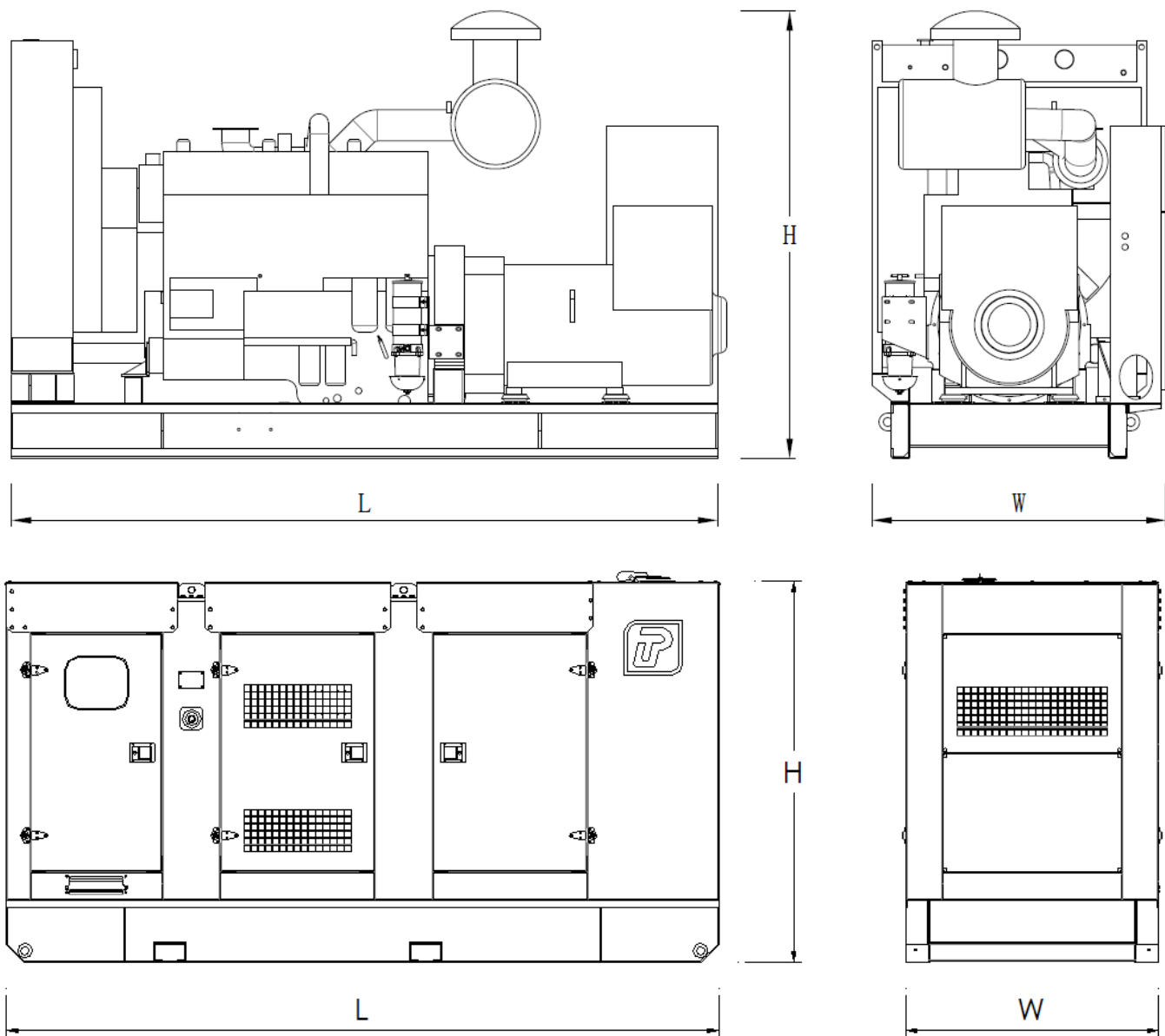
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



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	PYC500B
Prime Rating (kw)	360
Standby Rating (kw)	400
Rate current(A)	650
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	YC6T600L-D22
Gross Engine output-Prime (kw)	401
Gross Engine output-Standby (kw)	441
Bore * stroke (mm)	145*165
Cylinders and structure	6 In line
Displacement(Liter)	16.35
Compression Ratio	15:1
Intake way	Turbocharged & Intercooled
Max intake resistance (KPa)	5
Air intake (m3/h)	1758
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	4350
Exhaust temp (°C)	580
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	628
Coolant capacity (L)	89
Highest water temperature(°C)	99
Minimum air opening to room (m2)	2.2/1.9
Thermostat range (°C)	75-85
Max oil temperature (°C)	110
Lubrication system oil capacity (L)	56
Rate load fuel consumption(L/H)	98.2
Standard Governor/Class	electronic
Emission	China Tier 2
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	3291*1345*1714	3559	—
Silent Type	4700*1700*2450	5509	1100

Contact Us

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