

# PYC500B

Prime Power: 360KW/450KVA

Standby Power: 400KW/500KVA

Voltage: 400V

Powered by Yuchai YC6MJ600-D30 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  $\leq 1S(Voltage \pm 3\%)$
- 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 / IS08528:2018  
(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 room.

## 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
- Manual book and files



## Diesel Engine

- Model: YC6MJ600-D30
- Integral crankcase and integral cylinder head are adopted, which ensure good reliability. Wet cylinder liner is adopted, which ensures the wear resistant and easy maintenance;
- High-strength alloy crankshaft is adopted, which ensures good wear resistance, and long service life.
- The internal cooling oil passage technology is adopted for piston, which ensures high temperature resistance and good reliability;
- Advanced and mature electronically-control high pressure common rail fuel system and secondary injection technology are adopted, ensuring better dynamic performance and lower fuel consumption.
- G3 performance requirements for generator set are met.
- Yuchai 6MJ series engine after more than 10 years market trial, is widely used in heavy bus, heavy truck, engineering machinery, ship and generator set. After its configuration is upgraded to electronically-control high pressure common rail, the emission meets the requirements for non-road stage III; and it is characterized by sufficient margin, stronger dynamic performance, less fuel consumption and better transient loading capability.



## 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  $F_1$
- Apparent power  $PR$
- Power factor  $PF$
- Coolant temperature  $WT$
- Temperature  $^{\circ}C$  display
- Oil pressure  $OP$
- Engine speed
- 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  $V$
- 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

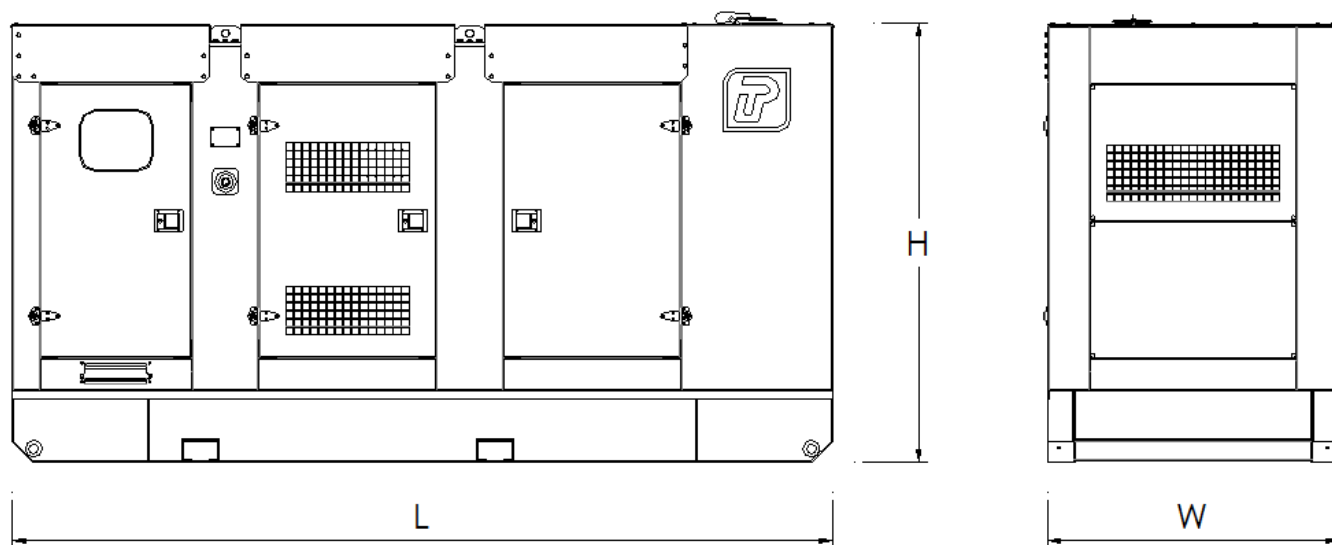
Engine Model	YC6MJ600-D30
Gross Engine output-Prime (kw)	401
Gross Engine output-Standby (kw)	441
Bore * stroke (mm)	131*145
Cylinders and structure	6 In line
Displacement(Liter)	11.726
Compression Ratio	16.8:1
Intake way	Supercharge/Air-Air intercooling
Max intake resistance (KPa)	5
Air intake (m3/h)	1750
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	4100
Exhaust temp (°C)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	650
Coolant capacity (L)	62
Highest water temperature(°C)	99
Minimum air opening to room (m2)	2.1/1.7
Thermostat range (°C)	80-90
Max oil temperature (°C)	120
Lubrication system oil capacity (L)	30
Rate load fuel consumption(L/H)	97.3
Standard Governor/Class	Electronically controlled high voltage common rail
Emission	China Tier 3

## 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
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Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3052*1239*1685	2950	-
Silent Type	4300*1594*2250	4750	900

**Contact Us**

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