

# PYC225B

**Prime Power: 160KW/200KVA**

**Standby Power: 180KW/225KVA**

**Voltage: 400V**

**Powered by Yuchai YC6MK285L-D20 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

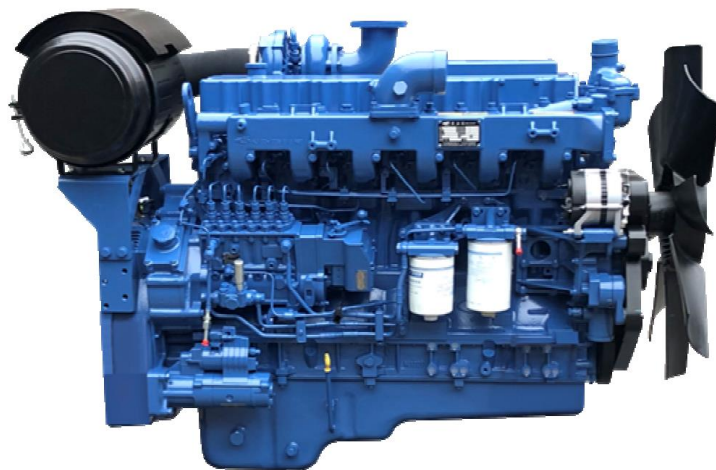
## Standard Configuration

- 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: YC6MK285L-D20
- YC6MK series engines are developed and designed with internationally advanced design concept and methods as well as several technological achievements in modern diesel engine research. The engine has strong power, reliable quality, high efficiency and fuel efficiency, and its indicators reach the internationally advanced level;
- 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.
- The advanced technology of four-valve + high-efficiency turbocharged & intercooled is adopted, ensuring sufficient air inflow and sufficient combustion at low fuel consumption;
- The internal cooling oil passage technology is adopted for piston, the engine oil flowing through the piston removes the piston heat in time so that the piston can withstand higher combustion temperature, making the engine highly reliable.
- Special piston seal technology and valve oil seal technology are adopted, making the engine oil consumption low.
- G3 performance requirements for generator set are met.



## 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

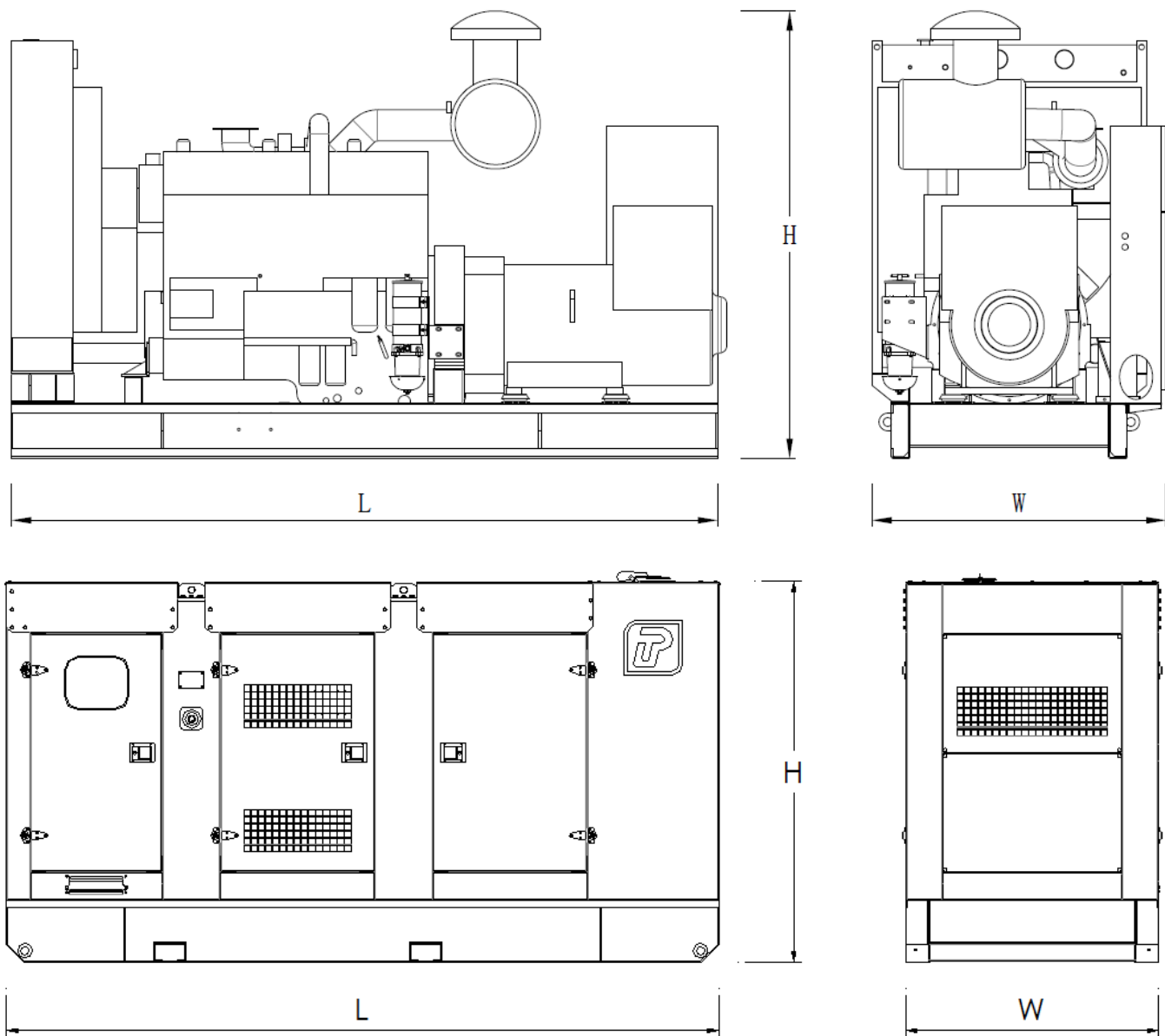
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



## 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	PYC225B
Prime Rating (kw)	160
Standby Rating (kw)	180
Rate current(A)	288
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	YC6MK285L-D20
Gross Engine output-Prime (kw)	192
Gross Engine output-Standby (kw)	211.2
Bore * stroke (mm)	123*145
Cylinders and structure	6 In line
Displacement(Liter)	10.34
Compression Ratio	16.8:1
Intake way	Turbocharged & Intercooled
Max intake resistance (KPa)	5
Air intake (m3/h)	732
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	1842
Exhaust temp (°C)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	612
Coolant capacity (L)	65
Highest water temperature(°C)	99
Minimum air opening to room (m2)	1.8/1.5
Thermostat range (°C)	80-90
Max oil temperature (°C)	120
Lubrication system oil capacity (L)	30
Rate load fuel consumption(L/H)	46.7
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	2900*1197*1599	2185	—
Silent Type	3500*1245*2052	3445	550

Contact Us

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