



# **PYC275B**

Prime Power: 200KW/250KVA Standby Power: 220KW/275KVA Voltage: 400VAC

≤0.3%

Powered by Yuchai YC6MK350-D30 Engine

## **Genset Performance**

- 230/400VAC, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop ≤3%
- Voltage regulation
- 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</li>
  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.

## **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)
- Molded case circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files



# **Equipment Instruction**

## Diesel Engine

- Model: PYC275B-YC6MK350-D30
- Construction: High strength cylinder block, alloy forged steel crankshaft, alloy steel connecting rod and inner cooling oil channel piston make the engine more durable, lighter and more compact in similar products.
- Intake: Charge inter-cooling
- Advanced and mature electronic common rail + high efficiency booster technology is adopted to accurately control the fuel injection volume. Adequate intake to ensure that the diesel engine under different loads, full combustion, less emissions.
- Using full-flow oil cooler and heat dissipation efficiency is increased by 30%. Oil temperature is effectively reduced.
  Lubricating oil at a reasonable temperature is to reduce friction loss.
- The piston adopts internal cooling channel to cool oil, effectively reducing the piston temperature so as to have a long service life.
- Adopt German FEV technology platform; Reliability, fuel consumption and other main performance indicators reach the advanced level in China; Meet the requirement of G3 grade of genset performance.
- Conform to non-road country T3 and European S3A standards.

Engine Operating Environment Description:

1800r/min engine--altitude less than 1000 m, ambient temperature less than 40  $\,^\circ \! \mathbb{C}$  1500r/min engine--altitude less than1000 m, ambient temperature less than 40  $\,^\circ \! \mathbb{C}$ 

### 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



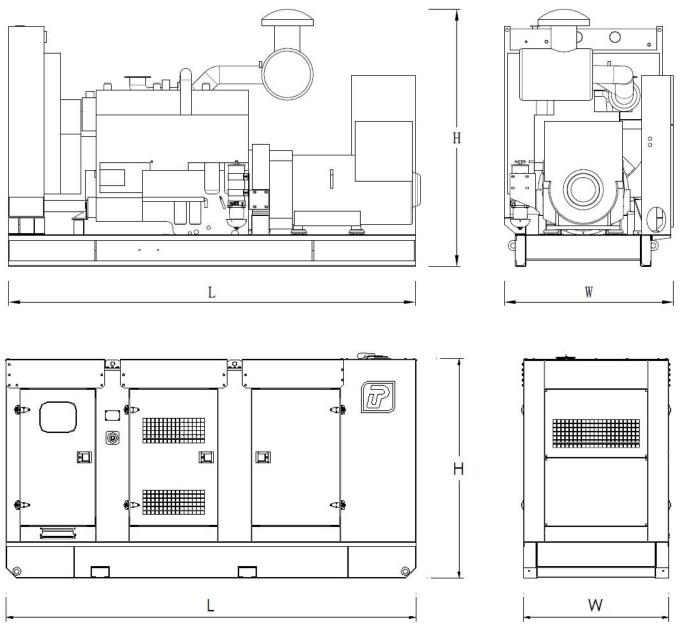
# **Data sheet of Genset**



Genset			
Model	PYC275B		
Prime Rating (kw)	200		
Standby Rating (kw)	220		
Rate voltage(V)	400		
Rate current(A)	361		
Power factor	0.8		
Frequency(Hz)	50		
Eng	ine		
Engine Model	YC6MK350-D30		
Gross Engine output-Prime (kw)	235		
Gross Engine output-Standby (kw)	258.5		
Bore * stroke (mm)	123*145		
Cylinders and structure	6 In line		
Displacement(Liter)	10.338		
Compression Ratio	16.8:1		
Intake way	Charge inter-cooling		
Max intake resistance (KPa)	5		
Air intake (m3/h)	1290		
Max exhaust back pressure (KPa)	10		
Exhaust gas flow (m3/h)	3760		
Exhaust temp (°C)	580		
Cooling way	Water Radiator & Fan		
Fan exhaust flow (m3/min)	251		
Coolant capacity (L)	78		
Highest water temperature(℃)	95		
Minimum air opening to room (m2)	2.1/1.9		
Thermostat range (℃)	75-83		
Max oil temperature (℃)	115		
Lubrication system oil capacity (L)	28		
Rate load fuel consumption(L/H)	54.5		
Standard Governor/Class	Electronic		
Alternator			
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		
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# **Dimension and Weight**





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	2929*1102*1598	2185	-
Silent Type	3950*1400*2115	3585	600

## Contact Us

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