



# **PYC2250B**

Prime Power:1700KW/2125KVA Standby Power: 1800KW/2250KVA Voltage: 400VAC

≤3%

Powered by Yuchai YC12VC2700-D31 Engine

### **Genset Performance**

- 230/400VAC, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop
- 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</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.

## **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**

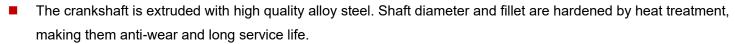
- Starting batteries
- Fuel tank
- Oil-water separator
- Sensor for low coolant level, low fuel/oil level
- Automatically monitoring & controlling system of city power
- Coolant heater
- Oil heater
- Heat exchanger--Water cooled tower system
- Silent type/Trailer
- Standardized container
- Design and construction of environmental protection; engineering for the Genset room.

## **Equipment Instruction**



## **Diesel Engine**

- Model: PYC2250B- YC12VC2700-D31
- Construction: High strength cylinder block, alloy forged steel crankshaft, alloy steel connecting rod and internal cooling oil pipe piston make the engine more durable.
- Intake: Charge inter-cooling
- Four valves + pressurized intercooling technology, sufficient air intake, full combustion and low fuel consumption.
- It adopts electric control unit pump technology, running smoothly; good transient speed regulation; strong loading capacity.
- The engine body is made of high-strength material, with cambered reinforcement mesh structure and 4-bolt main bearing structure. High stiffness, small vibration and low noise.



- World-class equipment and technology production; stable and reliable quality.
- Supporting dual-energy startup.
- One cylinder and one lid structure, with maintenance window on the side of the machine body for easy maintenance. 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  $\,^\circ$ C 1500r/min engine--altitude less than1000 m, ambient temperature less than 40  $\,^\circ$ 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

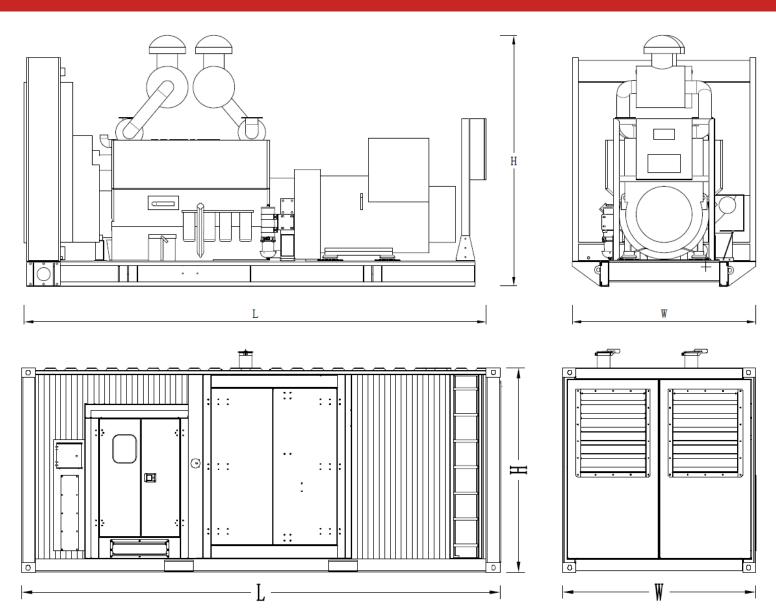
# **Data sheet of Genset**



Model	PYC2250B			
Prime Rating (kw)	1700			
Standby Rating (kw)	1800			
Rate voltage(V)	400			
Rate current(A)	3067			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	YC12VC2700-D31			
Gross Engine output-Prime (kw)	1805			
Gross Engine output-Standby (kw)	1985			
Bore * stroke (mm)	200*210			
Cylinders and structure	12 V-Type			
Displacement(Liter)	79.17			
Compression Ratio	13.5: 1			
Intake way	Supercharge/Water-Air intercooler			
Max intake resistance (KPa)	5			
Air intake (m3/h)	11507			
Max exhaust back pressure (KPa)	10			
Exhaust gas flow (m3/h)	25776			
Exhaust temp (°C)	550			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	3000			
Coolant capacity (L)	676			
111.1	95			
Minimum air opening to room (m2)	12.0/11.0			
——————————————————————————————————————	75-85			
Thermostat range (°C)	110			
Lubrication system oil capacity (L)	310			
Rate load fuel consumption(L/H)	441.9			
Standard Governor/Class	EUP			
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 GC7110.2			
	<u>.                                    </u>			

# **Dimension and Weight**





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	6200*2320*2820	14650	-
Silent Type	-	-	-

## **Contact Us**

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