



# **PYC1250B**

Prime Power:900KW/1125KVA Standby Power: 1000KW/1250KVA Voltage: 400VAC

Powered by Yuchai YC12VTD1500-D30 Engine

### **Genset Performance**

- 230/400VAC, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop
- ≤3%
- 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
- $\leq$ 1S(Voltage  $\pm$ 3%)
- THF (Telephone Harmonic Factor) <3
- <50 TIF (Telephone Influence Factor)
  - 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: PYC1250B-YC12VTD1500-D30
- 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.
- High pressure common rail fuel injection system, excellent speed regulation performance, fast and powerful loading (5S).
- 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.
- The crankshaft is extruded with high quality alloy steel. Shaft diameter and fillet are hardened by heat treatment, making them anti-wear and long service life.
- 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

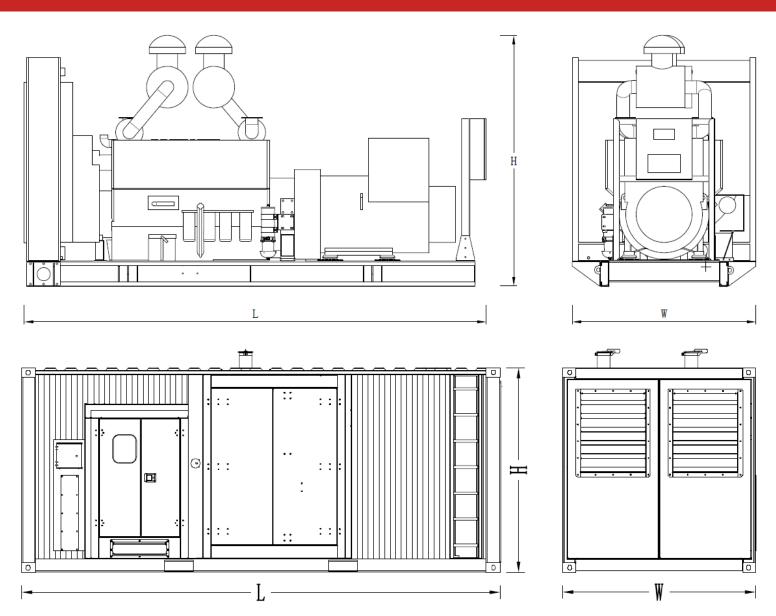
# **Data sheet of Genset**



Genset			
Model	PYC1250B		
Prime Rating (kw)	900		
Standby Rating (kw)	1000		
Rate voltage(V)	400		
Rate current(A)	1624		
Power factor	0.8		
Frequency(Hz)	50		
Engine			
Engine Model	YC12VTD1500-D30		
Gross Engine output-Prime (kw)	1000		
Gross Engine output-Standby (kw)	1100		
Bore * stroke (mm)	152*180		
Cylinders and structure	12 V-Type		
Displacement(Liter)	39.2		
Compression Ratio	14: 1		
Intake way	Supercharge/Water-Air intercooler		
Max intake resistance (KPa)	5		
Air intake (m3/h)	4206		
Max exhaust back pressure (KPa)	10		
Exhaust gas flow (m3/h)	9858		
Exhaust temp (°C)	550		
Cooling way	Water Radiator & Fan		
Fan exhaust flow (m3/min)	2050		
Coolant capacity (L)	419		
	97		
Minimum air opening to room (m2)	7.2/6.4		
	75-85		
Thermostat range (°C)	120		
Lubrication system oil capacity (L)	210		
Rate load fuel consumption(L/H)	252.5		
Standard Governor/Class	Electronic Control High Pressure Common Rail		
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		

# **Dimension and Weight**





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	4802*2115*2457	8260	-
Silent Type	-	-	-

## **Contact Us**

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