



PYC1100B

Prime Power: 800KW/1000KVA Standby Power: 880KW/1100KVA Voltage: 400VAC

Powered by Yuchai YC12VTD1350-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%

≤3S

<50

The steady state voltage deviation $\leq \pm 1\%$

The transient frequency deviation

■ The transient voltage deviation

. ----

Frequency recovery time

≤**+**20% ≤**-**15%

Voltage recovery time

≤1S(Voltage±3%)

■ THF (Telephone Harmonic Factor) <3

■ 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: PYC1100B-YC12VTD1350-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; electric fuel drain and Water cooled exhaust pipe.
- 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 $\,^{\circ}\mathrm{C}$ 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

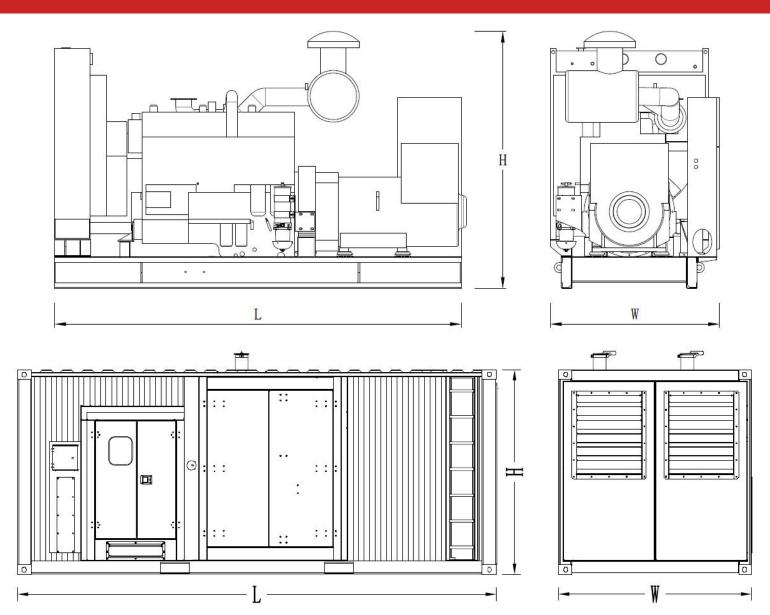
Data sheet of Genset



 Genset				
Model PYC1100B				
Prime Rating (kw)	800			
Standby Rating (kw)	880			
Rate voltage(V)	400			
Rate current(A)	1443			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	YC12VTD1350-D30			
Gross Engine output-Prime (kw)	900			
Gross Engine output-Standby (kw)	990			
Bore * stroke (mm)	152*180			
Cylinders and structure	12 V-Type			
Displacement(Liter)	39.2			
Compression Ratio	14: 1			
Intake way	Supercharge/Air-Air intercooler			
Max intake resistance (KPa)	5			
Air intake (m3/h)	4980			
Max exhaust back pressure (KPa)	10			
Exhaust gas flow (m3/h)	14410			
Exhaust temp ($^{\circ}\!$	550			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	1900			
Coolant capacity (L)	200			
Highest water temperature(℃)	102			
Minimum air opening to room (m2)	7.2/6.4			
Thermostat range (℃)	75-85			
Max oil temperature (℃)	110			
Lubrication system oil capacity (L)	210			
Rate load fuel consumption(L/H)	220			
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			

Dimension and Weight





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	4961*1812*2564	7780	-
Silent Type	12192*2438*2896	14580	2000

Contact Us

Powertec Generator System Co., Ltd

Add: Danshui Yanna Industry Zone, Huiyang, Huizhou, Guangdong, China

Tel: +86 752-3911119 / 3911118

Fax: +86 752-3911110

Web: www.powertec.com.cn

Email: powertec@powertec.com.cn