

玉柴机器 YC DIESEL

PYC2000B

Prime Power:1500KW/1875KVA Standby Power: 1600KW/2000KVA Voltage: 400V

Powered by Yuchai YC12VC2510-D31 Engine

Genset Performance

230/400V	50Hz, 0.8PF, 3 Phases 4 w	/ires

■ 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 ≤1S(Voltage±3%)

THF (Telephone Harmonic Factor) <3</p>

TIF (Telephone Influence Factor) <50
Comply to Standard NEMA MG1-22.43

Standard equipped with ambient temperature 40 ℃
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

Standard Configuration

- Guangxi Yuchai Engine
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40°C standard ambient temperature (50°C Optional)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

Optional Items

- Starting batteries
- Circuit breaker
- 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: YC12VC2510-D31

- Electronic unit pump, four-valve structure, high-efficiency turbocharged & intercooled, and Yuchai combustor technologies are adopted for realizing low fuel consumption, less emission, outstanding speed governing performance, and fast and high-quality loading.
- High-strength material, reinforced grid structure with cambered surface, and 4-bolt main bearing structure are adopted for the engine body; thus the engine body is characterized by high stiffness, slight vibration, and lower noise;
- The crankshaft is made of high-quality alloy steel by using all fiber extrusion forging process, and the journal and circular bead are subject to quenching heat treatment for improving wear resistance and prolonging service life;
- The world-class equipment and technologies are used for production; thus, the quality of such model is stable and reliable:
- G3 performance requirements for generator set are met;
- YC12VC series engine developed independently by Yuchai is a classic product. It is characterized by energy-saving and environment-friendly, excellent performance, compact structure, and reliability and durability; the indexes, such as pollutant emission, dynamic performance, economy, and reliability, reach the international advanced level.



- 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 for BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.



Intelligent Control System



Standard Meters

- 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 Function

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;.

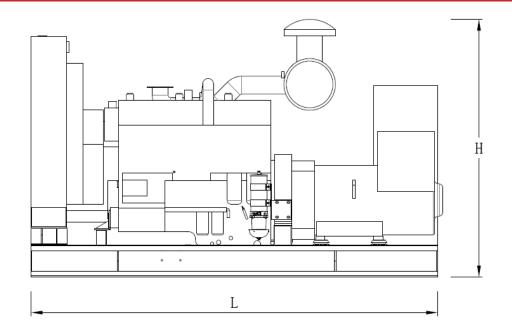
Data sheet of Genset

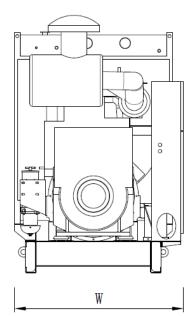


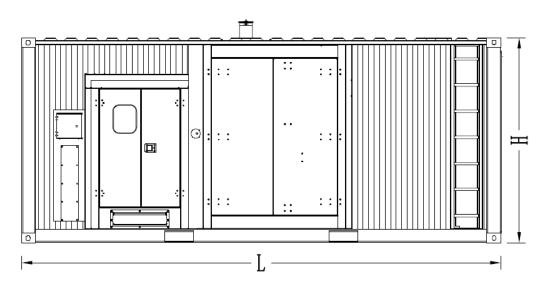
Genset						
Model	PYC2000B					
Prime Rating (kw)	1500					
Standby Rating (kw)	1600					
Rate current(A)	2706					
Power factor	0.8					
Frequency(Hz)	50					
Engine						
Engine Model	YC12VC2510-D31					
Gross Engine output-Prime (kw)	1680					
Gross Engine output-Standby (kw)	1850					
Bore * stroke (mm)	200*210					
Cylinders and structure	12 Cylind V-type					
Displacement(Liter)	79.17					
Compression Ratio	13.5: 1					
Intake way	Supercharge/Water-Air intercooling					
Max intake resistance (KPa)	5					
Air intake (m3/h)	11180					
Max exhaust back pressure (KPa)	10					
Exhaust gas flow (m3/h)	24647					
Exhaust temp (°C)	550					
Cooling way	Water Radiator & Fan					
Fan exhaust flow (m3/min)	2520					
Coolant capacity (L)	651					
Highest water temperature(℃)	95					
Minimum air opening to room (m2)	7.9/6.6					
Thermostat range (℃)	75-85					
Max oil temperature (°C)	110					
Lubrication system oil capacity (L)	310					
Rate load fuel consumption(L/H)	416.5					
Standard Governor/Class	Electronic unit pump					
Emission	China Tier 3					
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	Н					
Controller						
Brand POWERTEC						

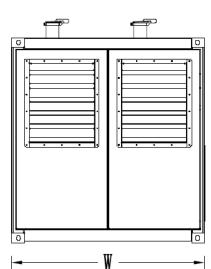
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	6023*2500*2921	14000	-
Silent Type	-	_	-

Contact Us

Powertec Generator System Inc.

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