

玉柴机器 YC DIESEL

PYC1625B

Prime Power:1200KW/1500KVA Standby Power: 1300KW/1625KVA Voltage: 400V

Powered by Yuchai YC12VTD2000-D30 Engine

Genset Performance

230/400V.	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 ≤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°C 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.



1 / 5 PGS: PYC1625B_01/2024

Equipment Instruction



Diesel Engine

- Model: YC12VTD2000-D30
- Four-valve design, which ensures adequate intake air; middle fuel injector, which achieves more sufficient fuel-air mixing and more complete combustion.
- Mature turbocharging and intercooling technology, which ensures adequate and stable air intake under each loading condition, and wide working range for economical fuel consumption;
- China III emission, imported ECU and high pressure common rail system, ensuring a great potential for emission upgrade;



- V-shaped cylinder block of mesh reinforcement structure and high-strength alloy crankshaft connecting rod, ensuring high reliability;
- Application of general parts, high serialization degree and "one-cylinder and one-head" structure, ensuring a low overall maintenance cost:
- The YC12VTD-D30 engine is independently developed based on domestic and foreign advanced technologies of large engines. Equipped with the high pressure common rail system, four-valve structure, turbocharger, intercooler, etc. and optimized and verified by the advanced combustion development technology of Yuchai, the engine is characterized by high energy efficiency, reliability, loading capacity and maintainability.

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



2 / 5 PGS: PYC1625B 01/2024

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;.

3 / 5 PGS: PYC1625B 01/2024

Data sheet of Genset

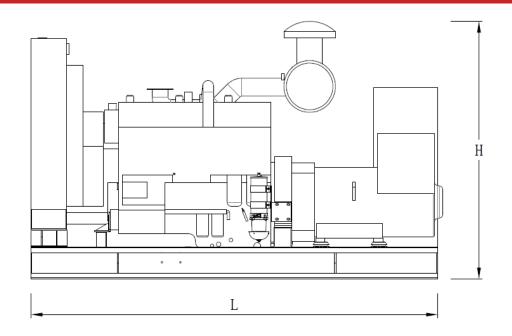


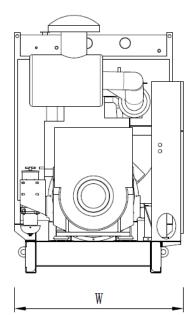
Model	PYC1625B					
Prime Rating (kw)	1200					
Standby Rating (kw)	1300					
Rate current(A)	2165					
Power factor	0.8					
Frequency(Hz)	50					
Engine						
Engine Model	YC12VTD2000-D30					
Gross Engine output-Prime (kw)	1345					
Gross Engine output-Standby (kw)	1480					
Bore * stroke (mm)	152*180					
Cylinders and structure	12 Cylind V-type					
Displacement(Liter)	39.2					
Compression Ratio	14:1					
Intake way	Supercharge/Water-Air intercooling					
Max intake resistance (KPa)	5					
Air intake (m3/h)	5250					
Max exhaust back pressure (KPa)	10					
Exhaust gas flow (m3/h)	12348					
Exhaust temp (°C)	550					
Cooling way	Water Radiator & Fan					
Fan exhaust flow (m3/min)	2430					
Coolant capacity (L)	419					
Highest water temperature(℃)	97					
Minimum air opening to room (m2)	7.9/6.6					
Thermostat range (℃)	75-85					
Max oil temperature (°C)	120					
Lubrication system oil capacity (L)	210					
Rate load fuel consumption(L/H)	338.6					
Standard Governor/Class	Electronically controlled high voltage common rail					
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					

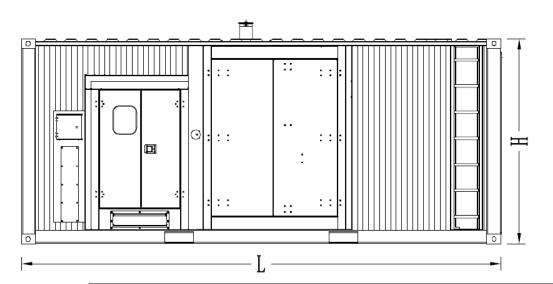
4 / **5** PGS: PYC1625B_01/2024

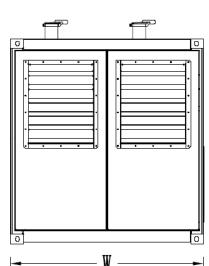
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	4637*2715*2633	9000	-
Silent Type	6058*2438*2896	13200	1500

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

5 / 5 PGS: PYC1625B_01/2024