

# PYC1500B

Prime Power:1100KW/1375KVA Standby Power: 1200KW/1500KVA Voltage: 400V

Powered by Yuchai YC12VTD1830-D31 Engine

## Genset Performance

- 230/400V, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop  $\leq 3\%$
- Voltage regulation  $\leq 0.3\%$
- The steady state frequency  $\leq 0.5\%$
- The steady state voltage deviation  $\leq \pm 1\%$
- The transient frequency deviation  $\leq +10\% \leq -15\%$
- The transient voltage deviation  $\leq +20\% \leq -15\%$
- Frequency recovery time  $\leq 3S$
- Voltage recovery time  $\leq 1S(\text{Voltage} \pm 3\%)$
- THF (Telephone Harmonic Factor)  $< 3$
- TIF (Telephone Influence Factor)  $< 50$   
Comply to Standard NEMA MG1-22.43
- Standard equipped with ambient temperature  $40^{\circ}\text{C}$   
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

## 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.

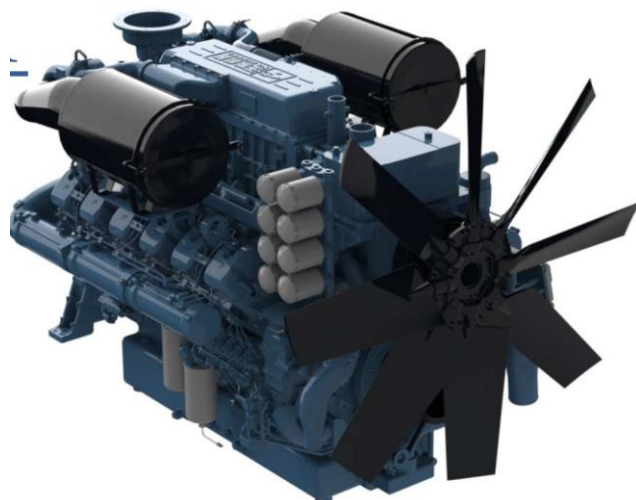
## Standard Configuration

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



## Diesel Engine

- Model: YC12VTD1830-D31
- 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-D31 series engines are independently developed products combining the advanced technology of large engines at home and abroad. It adopts configurations such as electronically controlled combination pump, four valves, supercharging and intercooling, and is optimized and verified by Yuchai's advanced combustion development technology. It has the characteristics of energy saving, high efficiency, high reliability, strong loading capacity and good 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 satisfy tough environment.
- Rotor dynamic balancing complys for BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.



## Standard Meters

- 3 phases voltage:  $U_a, U_b, U_c$
- Frequency  $F1$
- Apparent power  $PR$
- Power factor  $PF$
- Coolant temperature  $WT$
- Temperature  $^{\circ}C$  display
- Oil pressure  $OP$
- Engine speed
- 3 phases current:  $I_a, I_b, I_c$
- Active power  $PA$
- Power factor  $PF$
- Temperature  $^{\circ}C$  display
- KPa/Psi/Bar display
- Battery voltage  $V$
- Running Hour
- Starting timer:(999999)



## Standard Protection Function

### Genset Protection

- Programmable I/O signal
- Emergency stop

### Engine Protection

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail

### Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost
- Over Voltage
- Over frequency
- Under frequency

### Control System Components

- Manual/auto/stop/start
- Setting button
- Fault status indicators
- 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;.

## Genset

Model	PYC1500B
Prime Rating (kw)	1100
Standby Rating (kw)	1200
Rate current(A)	1985
Power factor	0.8
Frequency(Hz)	50

## Engine

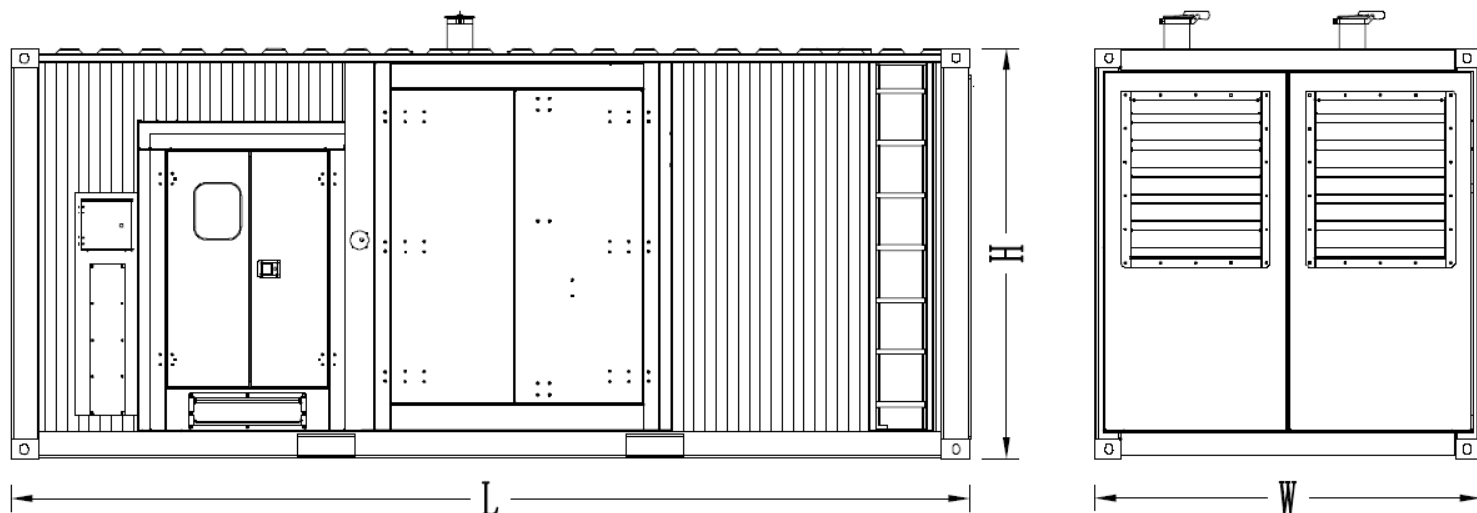
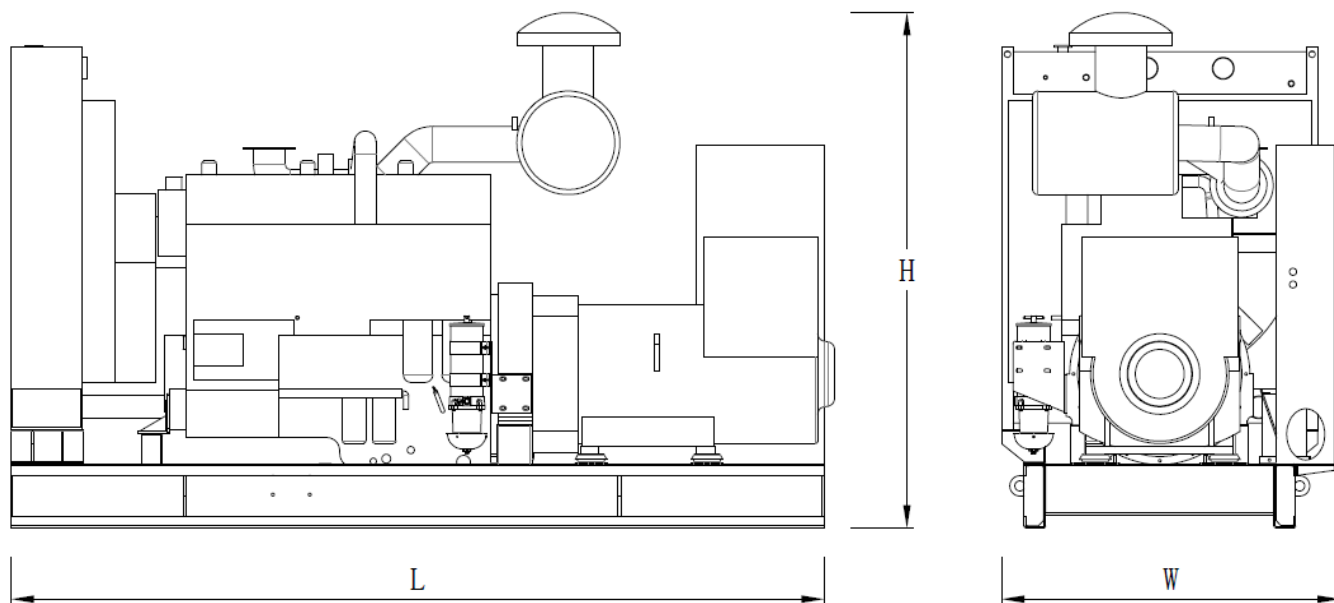
Engine Model	YC12VTD1830-D31
Gross Engine output-Prime (kw)	1220
Gross Engine output-Standby (kw)	1342
Bore * stroke (mm)	152*180
Cylinders and structure	12 Cylind V-type
Displacement(Liter)	39.2
Compression Ratio	14:1
Intake way	Supercharge/Water-Air intercooling
Max intake resistance (KPa)	5
Air intake (m3/h)	5577
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	13350
Exhaust temp (°C)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	2050
Coolant capacity (L)	485
Highest water temperature(°C)	97
Minimum air opening to room (m2)	6.7/5.6
Thermostat range (°C)	75-85
Max oil temperature (°C)	120
Lubrication system oil capacity (L)	210
Rate load fuel consumption(L/H)	303.4
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	H

## Controller

Brand	POWERTEC
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Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	4681*2101*2404	8500	-
Silent Type	6058*2438*2896	12700	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