

# PYC1000B

Prime Power: 730KW/913KVA

Standby Power: 800KW/1000KVA

Voltage: 400V

Powered by Yuchai YC6TH1220-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°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°C standard ambient temperature  
(50°C Optional)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files



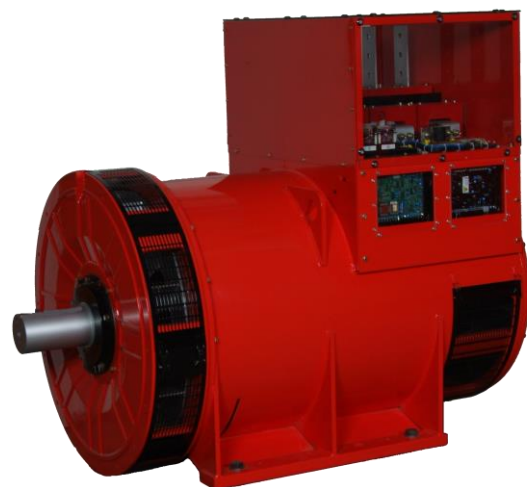
## Diesel Engine

- Model: YC6TH1220-D31
- The engine adopts the leading design concept naming “top-down cooling system” , for effectively reducing the temperature of the cylinder head, and enhancing the reliability.
- The cylinder block is made of high quality alloy cast iron materials, and using high detonation pressure and the structure of the integrated design concept, ensure the cylinder block strength of both the maintainability and quality;
- Electronic control unit pump technology makes the fuel system adaptable, simple maintenance, low maintenance cost; At the same time to implement the intelligent of the engine, the remote control;
- The Yuchai proprietary carbon-scraping self-cleaning technology is adopted for ensuring low lubricating oil consumption;
- YC6TH1220-D31 series engine is a self-developed product by Yuchai. It combine the advanced technology in the field of engines both at home and abroad, including positive design by using CAE technology to develop high strength of the structure of the body, cylinder head, crankshaft, connecting rod and other main parts. The high-performance turbocharged inter-cooled, efficient combustion and other technical means, make this engine is characterized by Fuel economy, low emission, high reliability, strong loading capability 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 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	PYC1000B
Prime Rating (kw)	730
Standby Rating (kw)	800
Rate current(A)	1317
Power factor	0.8
Frequency(Hz)	50

## Engine

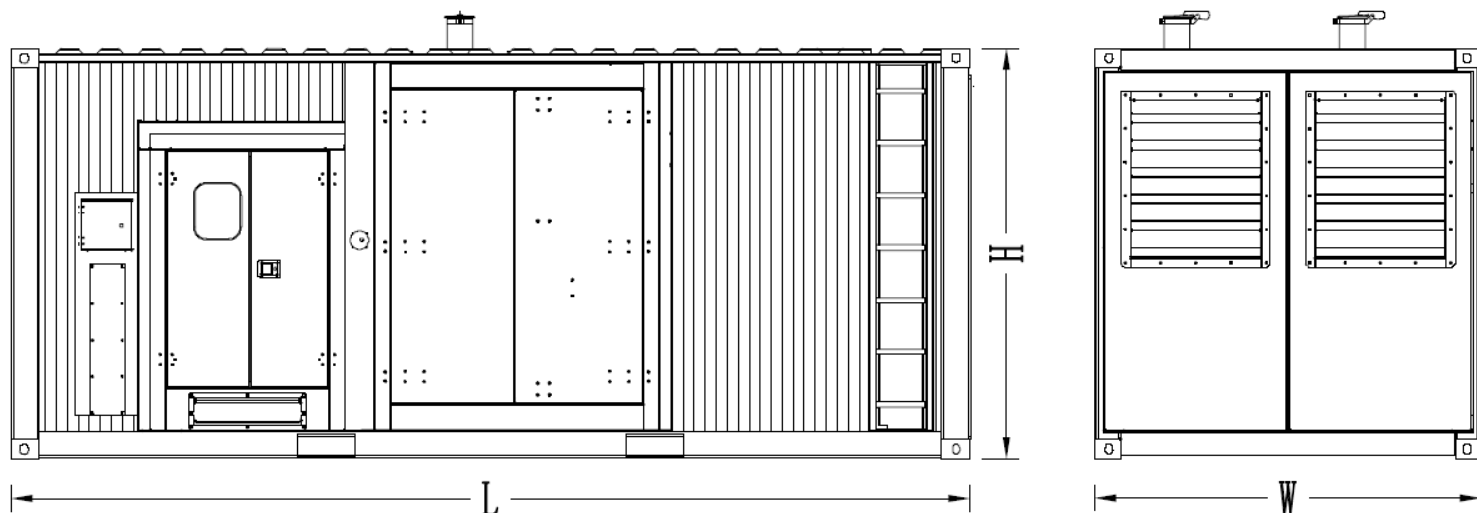
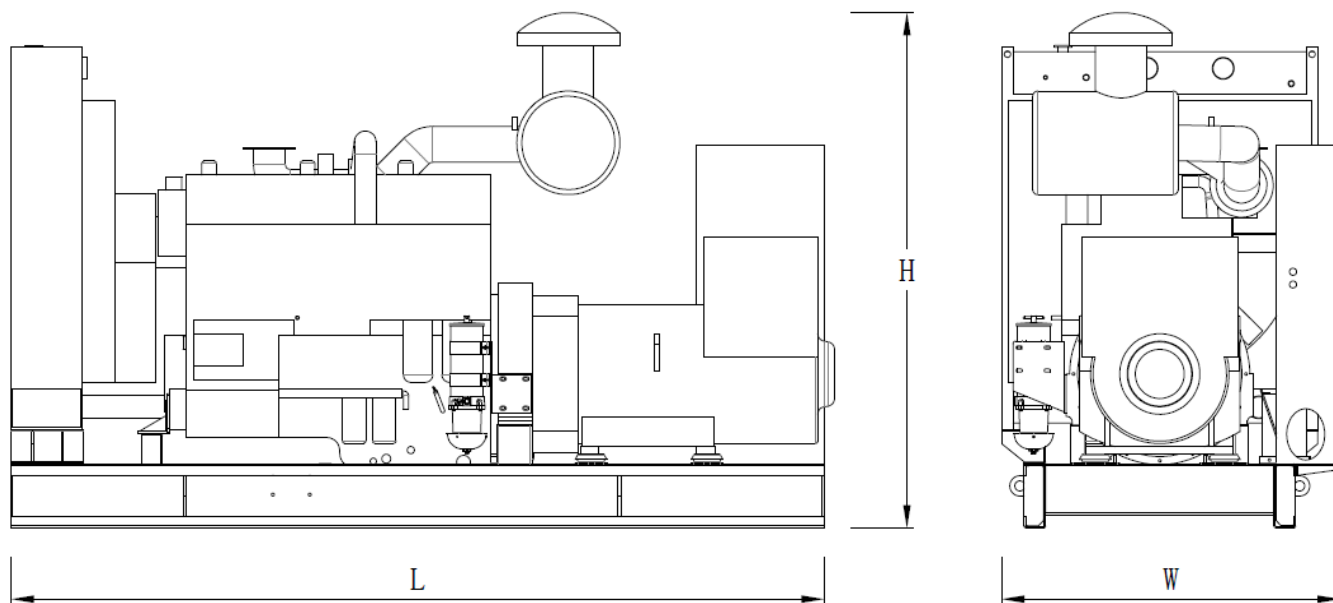
Engine Model	YC6TH1220-D31
Gross Engine output-Prime (kw)	815
Gross Engine output-Standby (kw)	897
Bore * stroke (mm)	175*195
Cylinders and structure	6 In line
Displacement(Liter)	28.14
Compression Ratio	15:1
Intake way	Supercharge/Air-Air intercooling
Max intake resistance (KPa)	5
Air intake (m3/h)	4302
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	10668
Exhaust temp (°C)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	1700
Coolant capacity (L)	230
Highest water temperature(°C)	97
Minimum air opening to room (m2)	4.9/4.1
Thermostat range (°C)	75-85
Max oil temperature (°C)	120
Lubrication system oil capacity (L)	95
Rate load fuel consumption(L/H)	199
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	4321*2000*2130	7500	-
Silent Type	6058*2438*2591	11300	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