

PYC2500B

Prime Power:1800KW/2250KVA Standby Power: 2000KW/2500KVA Voltage: 400V

Powered by Yuchai YC16VC3000-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 $\leq +10\% \leq -7\%$
- 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.

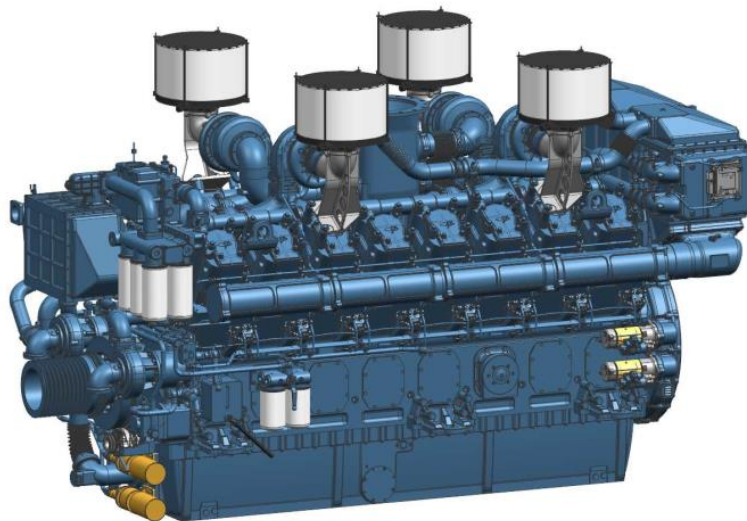
Standard Configuration

- 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: YC16VC3000-D31
- 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 world-class equipment and technologies are used for production; thus, the quality of such model is stable and reliable;
- The structure of one head for one cylinder is adopted; maintenance window is set at the side of the engine body, which ensures easy maintenance;
- Application of general parts, high serialization degree and "one-cylinder and one-head" structure, ensuring a low overall maintenance cost;
- G3 performance requirements for generator set are met;
- The YC16VC-D31 series engine is a classic product developed by Yuchai. It has the advantages of energy saving and environmental protection, excellent performance, compact structure, reliability and durability. The emission of pollutants, power performance, economy and reliability index reach the international advanced level.



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 complies 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

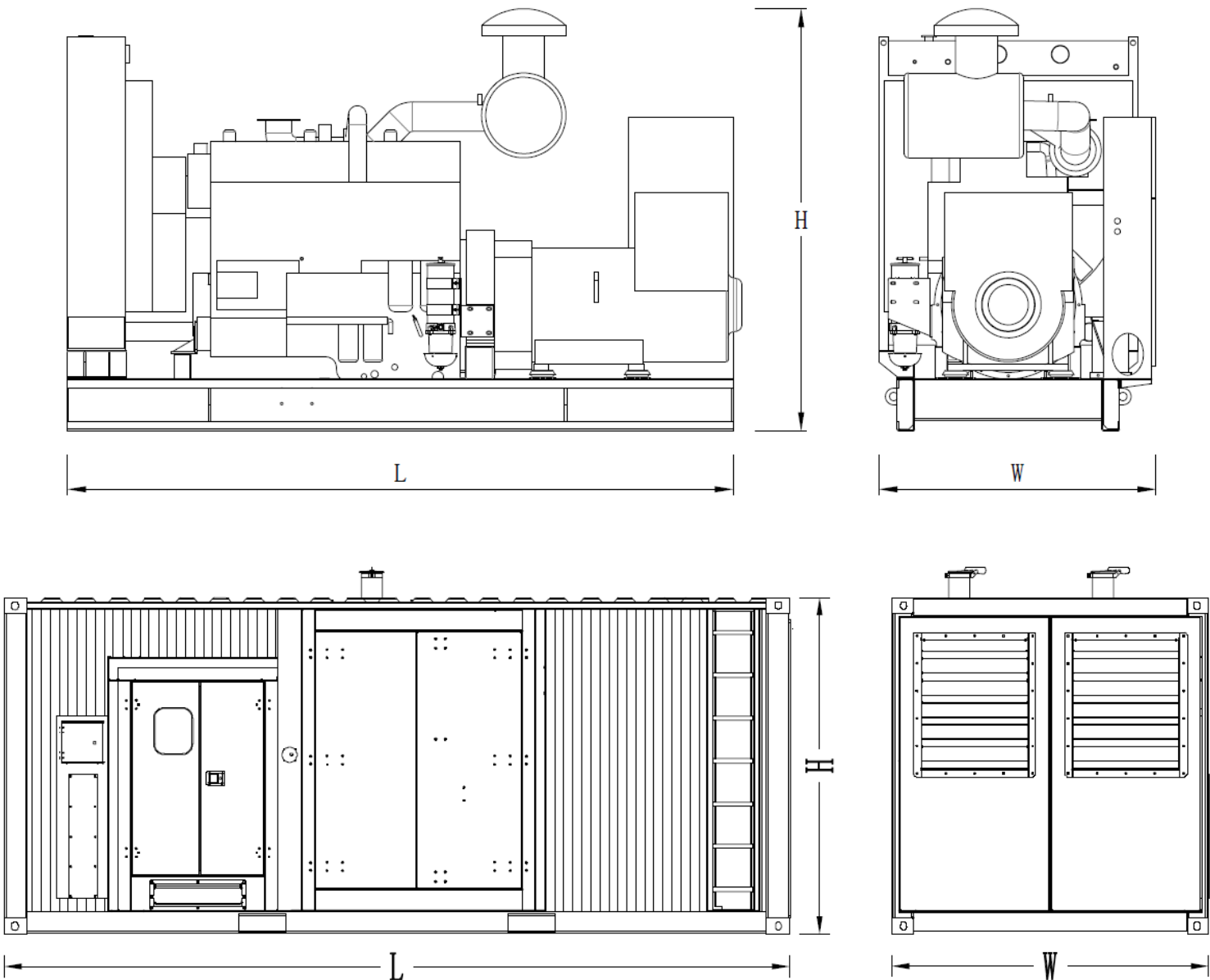
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



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	PYC2500B
Prime Rating (kw)	1800
Standby Rating (kw)	2000
Rate current(A)	3248
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	YC16VC3000-D31
Gross Engine output-Prime (kw)	2005
Gross Engine output-Standby (kw)	2206
Bore * stroke (mm)	200*210
Cylinders and structure	16 Cylind V-type
Displacement(Liter)	105.56
Compression Ratio	13.5: 1
Intake way	Supercharge/Water-Air intercooling
Max intake resistance (KPa)	6
Air intake (m3/h)	11640
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	33888
Exhaust temp (°C)	570
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	3600
Coolant capacity (L)	624
Highest water temperature(°C)	97
Minimum air opening to room (m2)	12/10
Thermostat range (°C)	75-85
Max oil temperature (°C)	110
Lubrication system oil capacity (L)	520
Rate load fuel consumption(L/H)	479.3
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



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	7571*2960*3462	22950	—
Silent Type	—	—	—

Contact Us

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