

PYC3750B

Prime Power: 2700KW/3375KVA Standby Power: 3000KW/3750KVA Voltage: 400V

Powered by Yuchai YC16VC4500-D30 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 / ISO8528:2018
(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: YC16VC4500-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 YC16VC-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 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

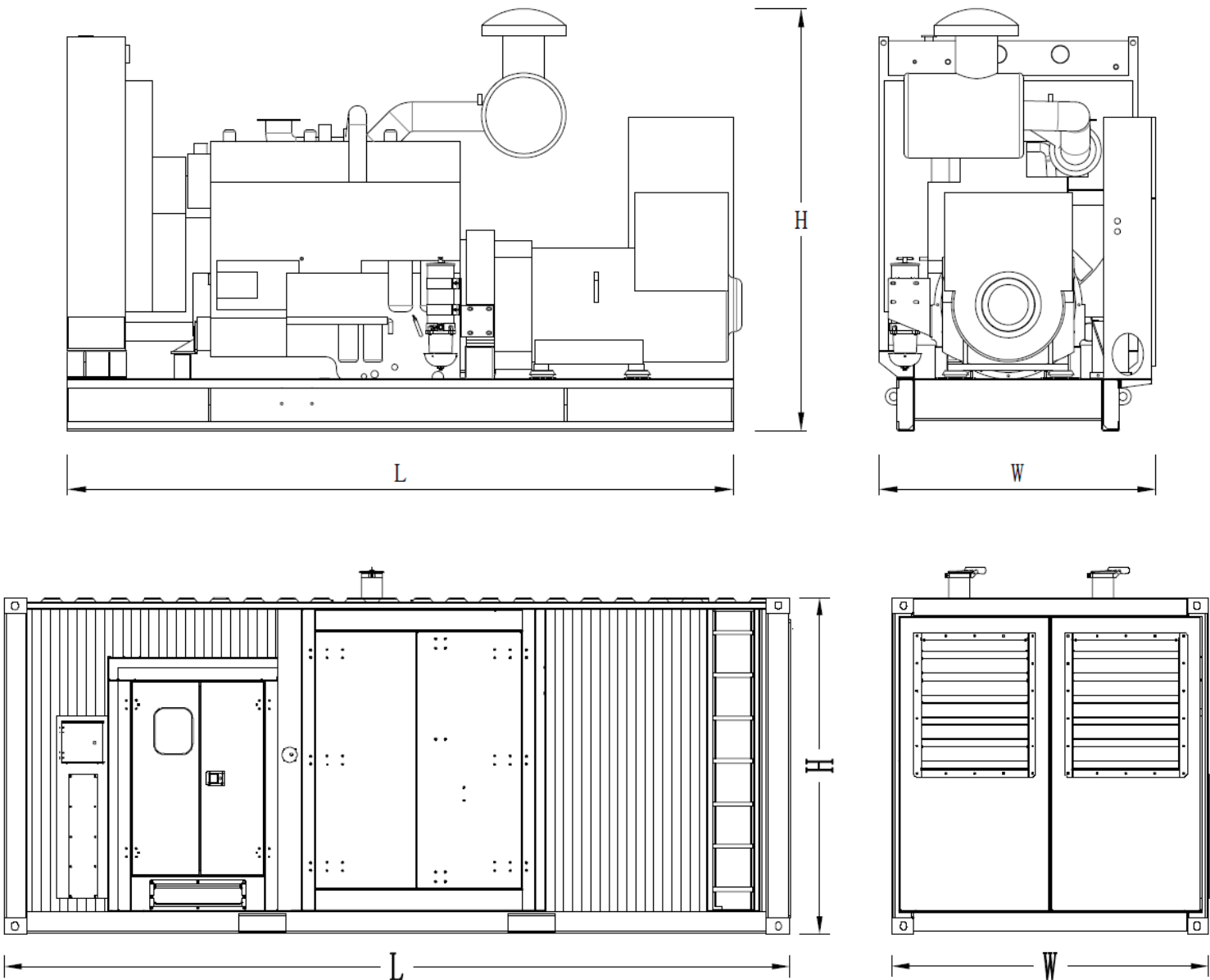
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



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	PYC3750B
Prime Rating (kw)	2700
Standby Rating (kw)	3000
Rate current(A)	4872
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	YC16VC4500-D30
Gross Engine output-Prime (kw)	3010
Gross Engine output-Standby (kw)	3311
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)	15300
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	43638
Exhaust temp (°C)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	4200
Coolant capacity (L)	839
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)	705.9
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	H
Controller	
Brand	POWERTEC



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	8600*2877*3356	25000	—
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