POWERTEC
Powertec Generator System Inc.

玉柴机器 YC DIESEL

PYC1375B

Prime Power: 1000KW/1250KVA Standby Power: 1100KW/1375KVA Voltage: 400V

Powered by Yuchai YC6C1660-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 ≤±1%
- The transient frequency deviation ≤+10% ≤-7%
- The transient voltage deviation ≤+20% ≤-15%
- Frequency recovery time ≤3S
- Voltage recovery time ≤1S(Voltage±3%)
- THF (Telephone Harmonic Factor) <3
- TIF (Telephone Influence Factor) <50
  Comply to Standard NEMA MG1-22.43
- Standard equipped with ambient temperature 40℃ 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

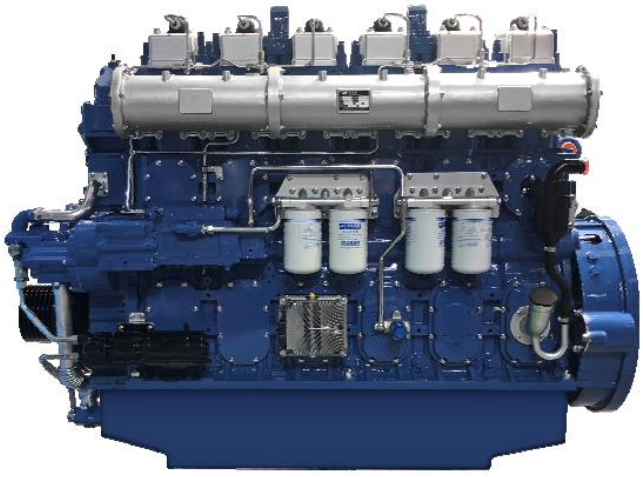
Standard Configuration

- Guangxi Yuchai Engine
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40℃ standard ambient temperature （50℃ 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.

Diesel Engine



- Model：YC6C1660-D30
- The technologies of four valves and turbocharged & intercooled are adopted for ensuring sufficient air intake, full combustion and low fuel consumption.
- Electronic unit pump technology is adopted for ensuring stable operation, good transient speed governing performance, and strong loading capability;
- High-quality alloy cast iron cylinder block of reinforced grid structure with cambered surface, high-strength vermicular iron cylinder head, dual protection anti-impact cylinder gasket structure, and self-developed cooling technology for the bottom of the cylinder head are adopted, which ensure high reliability;
- The Yuchai proprietary carbon-scraping self-cleaning technology is adopted for ensuring low lubricating oil consumption;
- Electric pre-supply oil technology is adopted, which effectively protects kinematic pair and improves the service life of engine;
- 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;
- YC6C1660-D30 series engine is a self-developed product by Yuchai combining the advanced technology for large engines both at home and abroad. The configurations, such as four valves, turbocharged & intercooled, and electronic unit pump, are adopted for it; and it is optimized and verified through the advanced combustion development technology of Yuchai, and is characterized by energy-saving and environment-friendly, high reliability, strong loading capability 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 satify 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 ℃ display
- Oil pressure OP
- Engine speed
- 3 phases current: L_a, L_b, L_c
- Active power PA
- Power factor PF
- Temperature ℃ 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

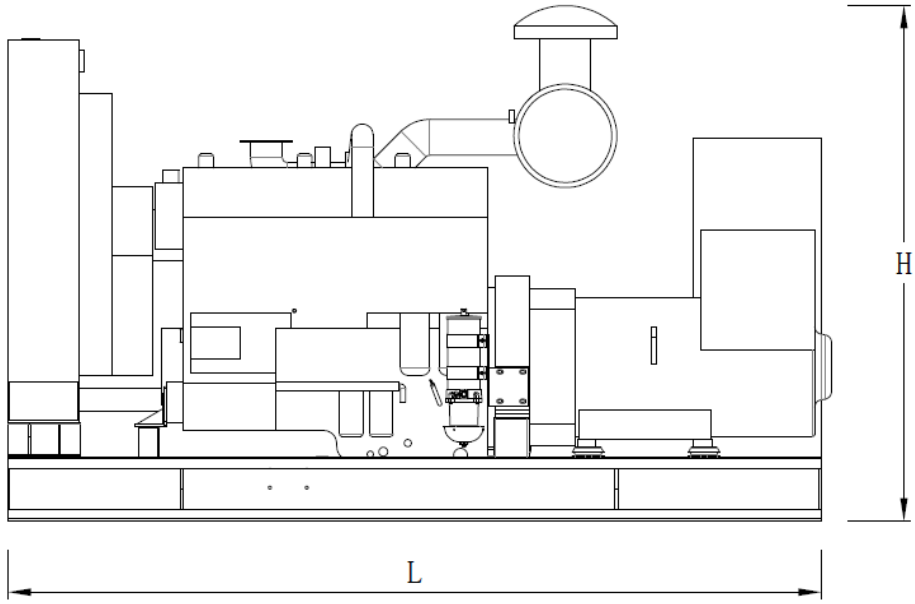
Control System Components

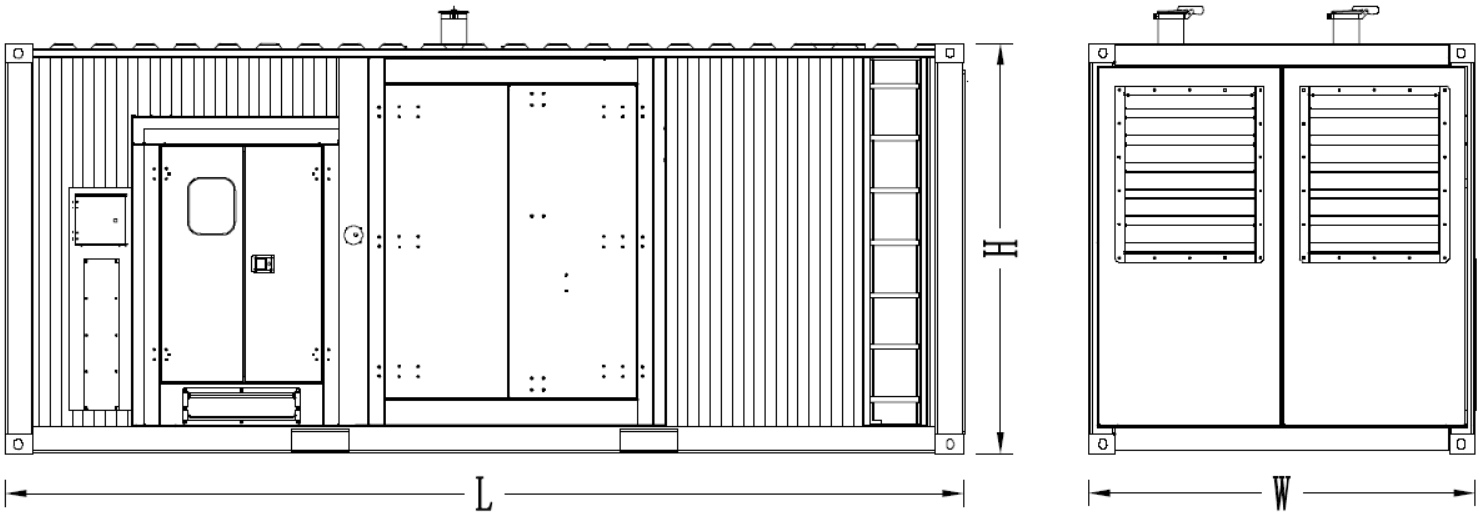
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer

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	PYC1375B
Prime Rating (kw)	1000
Standby Rating (kw)	1100
Rate current(A)	1804
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	YC6C1660-D30
Gross Engine output-Prime (kw)	1110
Gross Engine output-Standby (kw)	1221
Bore * stroke (mm)	200*210
Cylinders and structure	6 In line
Displacement(Liter)	39.58
Compression Ratio	13.5:1
Intake way	Supercharge/Air-Air intercooling
Max intake resistance (KPa)	5
Air intake (m3/h)	5412
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	13290
Exhaust temp (℃)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	1700
Coolant capacity (L)	230
Highest water temperature(℃)	97
Minimum air opening to room (m2)	5.7/4.7
Thermostat range (℃)	75-85
Max oil temperature (℃)	120
Lubrication system oil capacity (L)	160
Rate load fuel consumption(L/H)	276.8
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	4937*2260*2279	9300	-
Silent Type	6058*2438*2896	13500	1500

Contact Us

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