

PYC890B

Prime Power: 650KW/813KVA Standby Power: 710KW/888KVA Voltage: 400V

Powered by Yuchai YC6C1070-D31 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 $\leq \pm 1\%$

■ The transient frequency deviation ≤+10% ≤-15%

■ The transient voltage deviation ≤+20% ≤-15%

■ Frequency recovery time ≤3S

■ Voltage recovery time ≤1S(Voltage±3%)

■ THF (Telephone Harmonic Factor) <3</p>

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

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

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.



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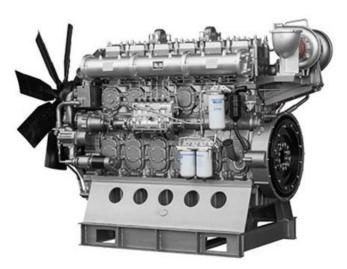
Equipment Instruction



Diesel Engine

■ Model: YC6C1070-D31

- 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;
- YC6C1070-D31 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.

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Intelligent Control System



Standard Meters

- 3 phases voltage: Ua, Ub, Uc
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- Oil pressure OP
- Engine speed

- 3 phases current: La, Lb, Lc
- Active power PA
- Power factor PF
- Temperature °C display
- KPa/Psi/Bar display
- Battery voltage V
- Running Hour
- Starting timer: (999999)



Standard Protection Function

Genset Protection

Programmable I/O signal

Engine Protection

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail

Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost

Control System Components

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

- Emergency stop
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail
- Over Voltage
- Over frequency
- Under frequency
- 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;.

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Data sheet of Genset

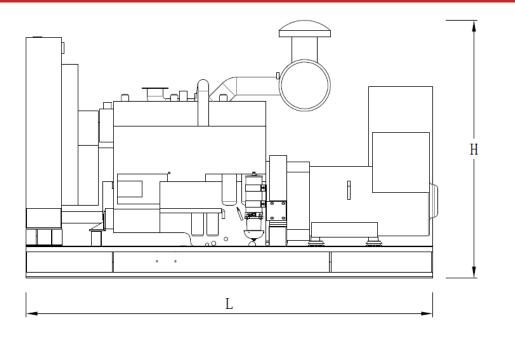


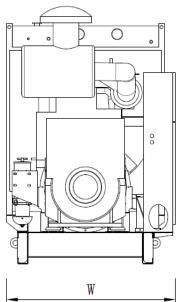
Genset			
Model	PYC890B		
Prime Rating (kw)	650		
Standby Rating (kw)	710		
Rate current(A)	1173		
Power factor	0.8		
Frequency(Hz)	50		
Engine			
Engine Model	YC6C1070-D31		
Gross Engine output-Prime (kw)	715		
Gross Engine output-Standby (kw)	787		
Bore * stroke (mm)	200*210		
Cylinders and structure	6 In line		
Displacement(Liter)	39.584		
Compression Ratio	14.5:1		
Intake way	Supercharge/Air-Air intercooling		
Max intake resistance (KPa)	6		
Air intake (m3/h)	4110		
Max exhaust back pressure (KPa)	10		
Exhaust gas flow (m3/h)	9816		
Exhaust temp (°C)	460		
Cooling way	Water Radiator & Fan		
Fan exhaust flow (m3/min)	965		
Coolant capacity (L)	230		
Highest water temperature(℃)	97		
Minimum air opening to room (m2)	5.7/4.7		
Thermostat range (°C) 75-85			
Max oil temperature (°C)	120		
Lubrication system oil capacity (L)	160		
Rate load fuel consumption(L/H)	181.6		
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	Н		
Controller			
Brand	POWERTEC		

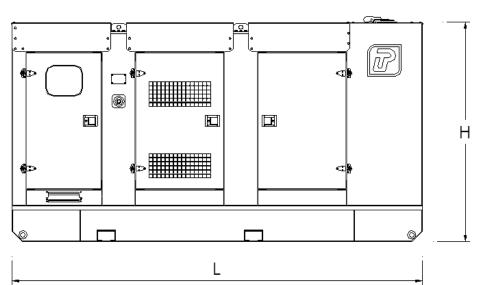
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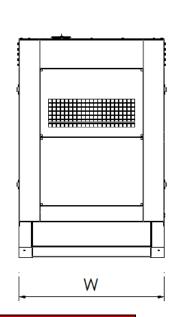
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	4300*1838*2284	7555	_
Silent Type	6058*2438*2896	11755	1500

Contact Us

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