



PYC890B

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

≤3%

≤0.3%

Powered by Yuchai YC6C1070-D31 Engine

Genset Performance

- 230/400VAC, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop
- Voltage regulation
- 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
- 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.

Optional Items

- Starting batteries
- 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)
- Molded case circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files



Diesel Engine

- Model: PYC890B-YC6C1070-D31
- Construction: High strength alloy cast iron has better rigidity, small vibration and low noise. The wet cylinder liner is easy to maintain.
- Intake: Charge inter-cooling
- Four valves + pressurized intercooling technology, sufficient air intake, full combustion and low fuel consumption.
- It adopts electronic control unit combined pump, ECU control smooth operation and good performance in speed regulation.
- Mechanical pump electronic speed regulation., operation smoothly, has good speed regulation and strong loading capacity.
- High quality alloy cast iron cylinder body with curved surface reinforced mesh structure, high strength vermicular cast iron cylinder cover, double insurance anti-punching cylinder



- Using Yuchai unique carbon scraping self-cleaning technology, lubricating oil consumption is low.
- Electric pre-oil supply technology is adopted to effectively protect the motion pair and prolong the service life.
- Supporting dual-energy startup.
- One cylinder and one lid structure, with maintenance window on the side of the machine body for easy maintenance. Conform to non-road country T3 and European S3A standards.

Engine Operating Environment Description:

1800r/min engine--altitude less than 1000 m, ambient temperature less than 40 $\,^\circ \! \mathbb{C}$ 1500r/min engine--altitude less than1000 m, ambient temperature less than 40 $\,^\circ \! \mathbb{C}$

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 with BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.



Notes: Above data of alternator comes from Stamford. Specification may alternated without advance notice.



Intelligent Control System



Standard

- 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

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;.

Notes: Above data of controller comes from POWERTEC GC6110. Customized solutions is available as required



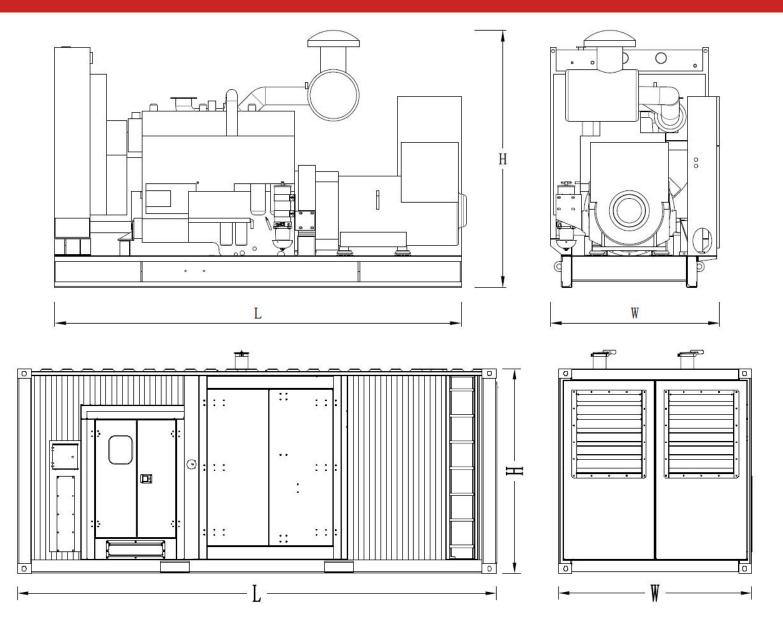
Data sheet of Genset



Genset			
Model PYC890B			
Prime Rating (kw)	650		
Standby Rating (kw) 710			
Rate voltage(V)	400		
Rate current(A)	1173		
Power factor	0.8		
Frequency(Hz)	50		
Eng	ine		
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)	39.58		
Compression Ratio 14.5:1			
Intake way	Supercharge/Air-Air intercooler		
Max intake resistance (KPa)	5		
Air intake (m3/h)	3960		
Max exhaust back pressure (KPa)	10		
Exhaust gas flow (m3/h)	12320		
Exhaust temp (℃)	460		
Cooling way	Water Radiator & Fan		
Fan exhaust flow (m3/min)	1350		
Coolant capacity (L)	197		
Highest water temperature(℃)	107		
Minimum air opening to room (m2)	5.8/5.0		
Thermostat range (℃)	75-85		
Max oil temperature (℃)	120		
Lubrication system oil capacity (L)	175		
Rate load fuel consumption(L/H) 182			
Standard Governor/Class	Electronic		
Alternator			
Rated Voltage(V)	400/230		
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 or DEEPSEA		
	1		

Dimension and Weight





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	4700*1770*2564	7555	-
Silent Type	6058*2438*2591	11355	1500

Contact Us

Powertec Generator System Co., Ltd

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