

PYC825B

Prime Power: 600KW/750KVA Standby Power: 660KW/825KVA Voltage: 400VAC

Powered by Yuchai YC6C1020-D31 Engine

Genset Performance

- 230/400VAC, 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 $\leq +10\% \leq -15\%$
- 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.

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

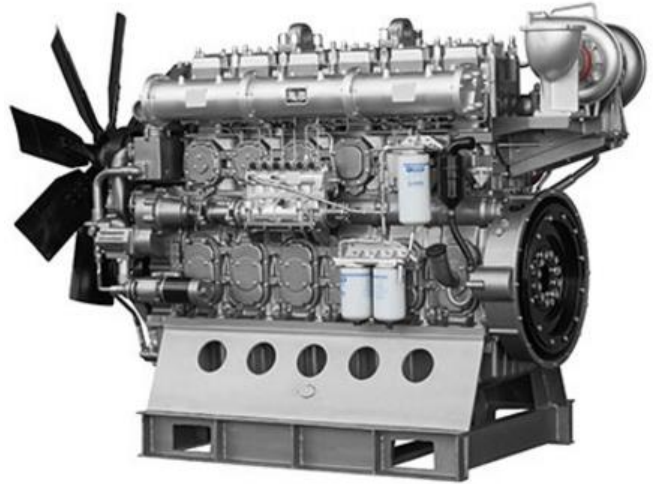
Optional Items

- 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.



Diesel Engine

- Model: PYC825B-YC6C1020-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 cushion structure, unique cooling technology at the bottom of cylinder cover ensure engine has high reliability.
- 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 °C

1500r/min engine--altitude less than 1000 m, ambient temperature less than 40 °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 satisfy tough environment.
- Rotor dynamic balancing complies 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.

Standard

- 3 phases voltage: U_a, U_b, U_c
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- Oil pressure OP
- Engine speed
- 3 phases current: I_a, I_b, I_c
- 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
- 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;.

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

Genset

Model	PYC825B
Prime Rating (kw)	600
Standby Rating (kw)	660
Rate voltage(V)	400
Rate current(A)	1083
Power factor	0.8
Frequency(Hz)	50

Engine

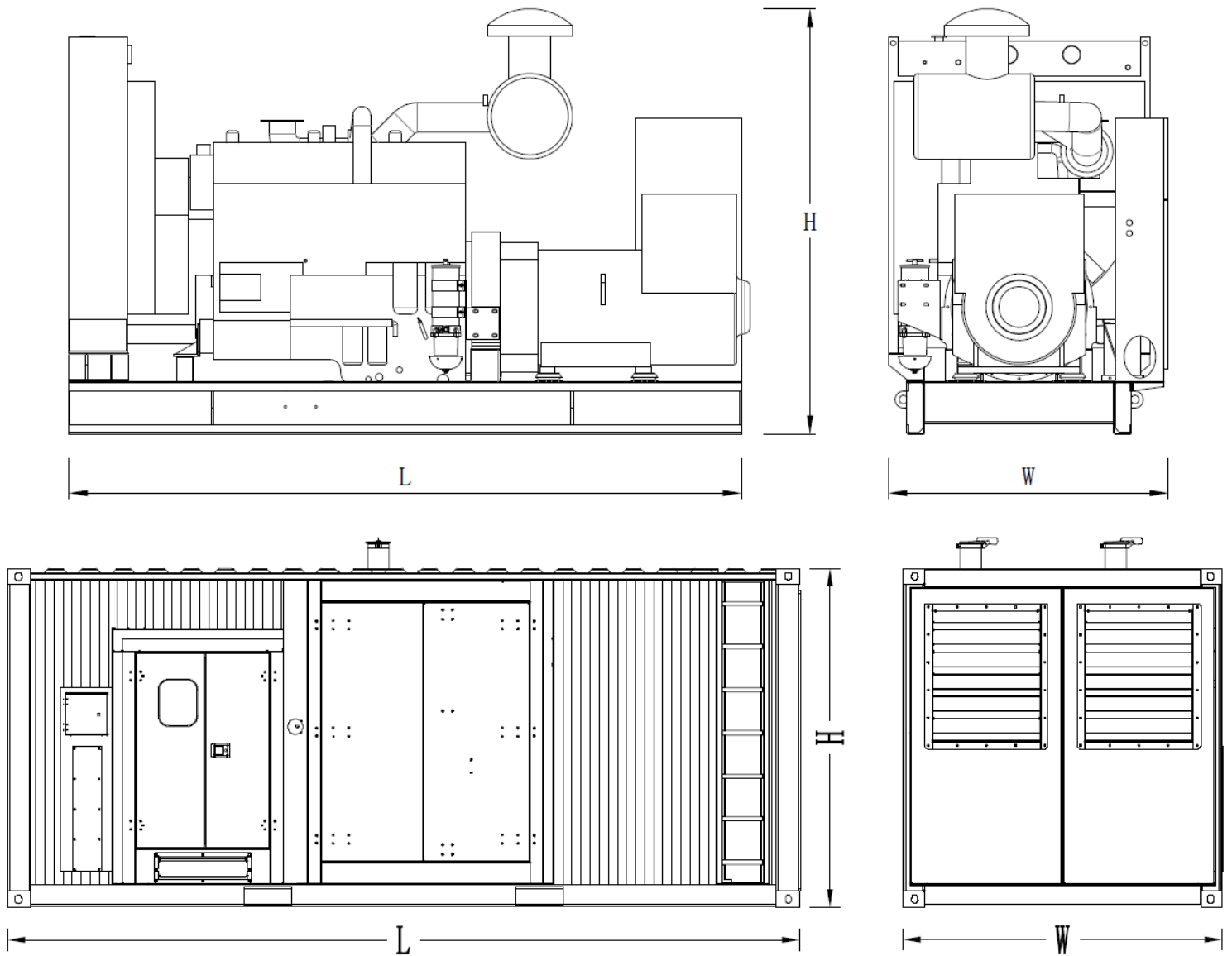
Engine Model	YC6C1020-D31
Gross Engine output-Prime (kw)	680
Gross Engine output-Standby (kw)	748
Bore * stroke (mm)	200*210
Cylinders and structure	6 In line
Displacement(Liter)	39.584
Compression Ratio	14.5:1
Intake way	Supercharge/Air-Air intercooler
Max intake resistance (KPa)	6
Air intake (m3/h)	3990
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	9672
Exhaust temp (°C)	550
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	965
Coolant capacity (L)	230
Highest water temperature(°C)	97
Minimum air opening to room (m2)	5.5/4.8
Thermostat range (°C)	75-85
Max oil temperature (°C)	120
Lubrication system oil capacity (L)	160
Rate load fuel consumption(L/H)	172.5
Standard Governor/Class	EUP

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	H

Controller

Brand	POWERTEC GC7110.2
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Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	4550*1766*2354	7489	-
Silent Type	6058*2438*2896	11689	1500

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