



# PYC825B

Prime Power: 600KW/750KVA Standby Power: 660KW/825KVA Vo

Voltage: 400V

Powered by Yuchai YC6TD1000-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  $\leq \pm 1\%$
- The transient frequency deviation  $\leq$ +10%  $\leq$ -15%

≤3S

 $\leq$ 1S(Voltage $\pm$ 3%)

- The transient voltage deviation  $\leq$ +20%  $\leq$ -15%
  - Frequency recovery time
- Voltage recovery time

- THF (Telephone Harmonic Factor) <3
- TIF (Telephone Influence Factor) <50</li>
  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

## **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)
- Circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files





### **Diesel Engine**

- Model: YC6TD1000-D30
- The main structures, such as engine body, are time-tested, which ensures the high reliability of the whole engine.
- Advanced and mature electronic unit pump and high-efficient turbocharged & intercooled technologies are adopted, which ensure precise control of fuel-injection quantity and sufficient air intake; and the full combustion, low fuel consumption and less emission of diesel engine under different load conditions are ensured;
- Full-flow oil cooler is adopted; thus heat dissipation efficiency is increased by 30% and oil temperature is effectively reduced; and the oil can lubricate the parts under reasonable temperature to reduce the friction loss.;



- The structure of one head for one cylinder is adopted, which ensures easy maintenance and reliable sealing;
- The internal cooling oil passage technology is adopted for piston, which effectively reduces piston temperature and ensures the long service life;
- YC6TDseries engine is a classic engine product developed by Yuchai, which is well-known and highly recognized in the market and has large market volume. YC6TD1000-D30 engines for generator sets, developed based on YC6TD engines, have advantages such as high reliability, durability, energy-saving and environment-friendly, compact structure, strong transient loading capacity and easy maintenance.

## 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: 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;.

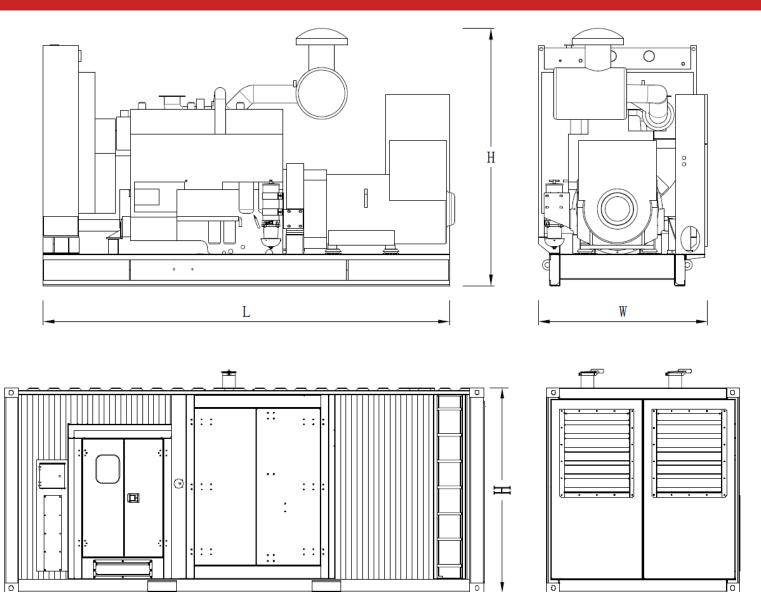
# **Data sheet of Genset**



Genset			
Model	PYC825B		
Prime Rating (kw)	600		
Standby Rating (kw)	660		
Rate current(A)	1083		
Power factor	0.8		
Frequency(Hz)	50		
Eng	ine		
Engine Model	YC6TD1000-D30		
Gross Engine output-Prime (kw)	668		
Gross Engine output-Standby (kw)	735		
Bore * stroke (mm)	152*180		
Cylinders and structure	6 In line		
Displacement(Liter)	19.598		
Compression Ratio	14:1		
Intake way	Supercharge/Air-Air intercooling		
Max intake resistance (KPa)	5		
Air intake (m3/h)	2490		
Max exhaust back pressure (KPa)	10		
Exhaust gas flow (m3/h)	10440		
Exhaust temp (℃)	585		
Cooling way	Water Radiator & Fan		
Fan exhaust flow (m3/min)	1160		
Coolant capacity (L)	160		
Highest water temperature(℃)	97		
Minimum air opening to room (m2) 4.1/3.4			
Thermostat range (℃)	75-85		
Max oil temperature ( $^{\circ}$ C)	120		
Lubrication system oil capacity (L)	52		
Rate load fuel consumption(L/H)	166.6		
Standard Governor/Class	Electronically controlled high voltage common rail		
Emission	China Tier 3		
Alterr	nator		
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		

# **Dimension and Weight**





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Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3950*1839*2019	4700	_
Silent Type	6058*2438*2591	8500	1500

## Contact Us

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