

# PYC815B

Prime Power: 600KW/750KVA Standby Power: 650KW/813KVA Voltage: 400VAC

Powered by Yuchai YC6TD1000-D30 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: PYC815B-YC6TD1000-D30
- Construction: Construction: High strength cylinder block, alloy forged steel crankshaft, alloy steel connecting rod and internal cooling oil pipe piston make the engine more durable, lighter and compact than other products.
- 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.
- Using high precision paper filter element.
- Adopting 24V standard electrical system.
- The parts have good universality and high serialization, one cylinder with one lid structure, to reduce comprehensive maintenance cost.
- The YC6TD series engine is a product developed independently according to the advanced technology of large engines at home and abroad. With four valves, supercharged intercooler and electronic controlled monomer pump, optimized and verified by advanced combustion development technology of Yuchai, it has the characteristics of energy saving, environmental protection, high reliability, strong loading capacity and good maintainability.



### 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: 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
- 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)	650
Rate voltage(V)	400
Rate current(A)	1083
Power factor	0.8
Frequency(Hz)	50

## Engine

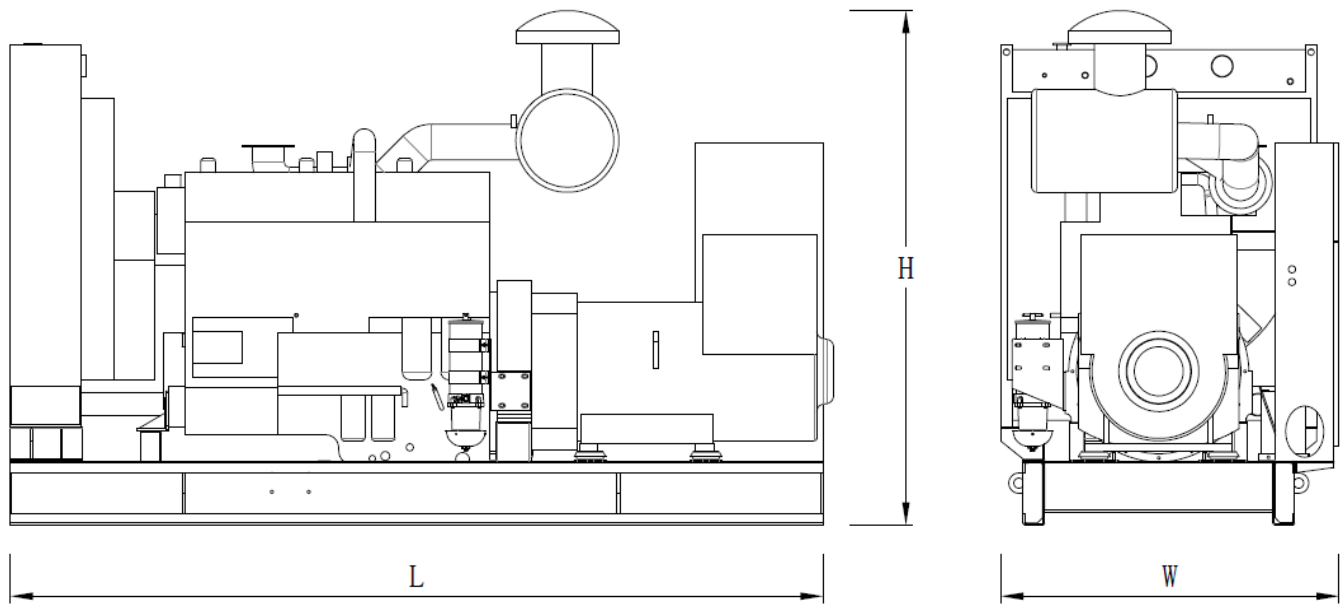
Engine Model	YC6TD1000-D30
Gross Engine output-Prime (kw)	668
Gross Engine output-Standby (kw)	735
Bore * stroke (mm)	152*180
Cylinders and structure	6 In line
Displacement(Liter)	19.598
Compression Ratio	14:1
Intake way	Supercharge/Air-Air intercooler
Max intake resistance (KPa)	5
Air intake (m3/h)	2490
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	10440
Exhaust temp (°C)	585
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	1160
Coolant capacity (L)	160
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)	52
Rate load fuel consumption(L/H)	166.6
Standard Governor/Class	Electronic Control High Pressure Common Rail

## 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	3750*1839*2019	4700	-
Silent Type	6058*2438*2591	8500	1500

**Contact Us**

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