



PYC190A

Prime Power: 140KW/175KVA Standby Power: 150KW/188KVA Voltage: 400VAC

≤0.3%

Powered by Yuchai YC6A230-D30 Engine

Genset Performance

- 230/400VAC, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop ≤3%
- 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



Equipment Instruction



Diesel Engine

- Model: PYC190A-YC6A230-D30
- Construction: High strength cylinder block, alloy forged steel crankshaft, alloy steel connecting rod and inner cooling oil channel piston make the engine more durable, lighter and more compact in similar products.
- Intake: Charge inter-cooling
- Advanced and mature electronic common rail + high efficiency booster technology is adopted to accurately control the fuel injection volume. Adequate intake to ensure that the diesel engine under different loads, full combustion, less emissions.



- Using full-flow oil cooler and heat dissipation efficiency is increased by 30%. Oil temperature is effectively reduced. Lubricating oil at a reasonable temperature is to reduce friction loss.
- The piston adopts internal cooling channel to cool oil, effectively reducing the piston temperature so as to have a long service life.
- Meet the requirement of G3 grade of genset performance.
- 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 $\,^\circ\!C$ 1500r/min engine--altitude less than1000 m, ambient temperature less than 40 $\,^\circ\!C$

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 for BS5625, class 2.
- 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 displayKPa/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



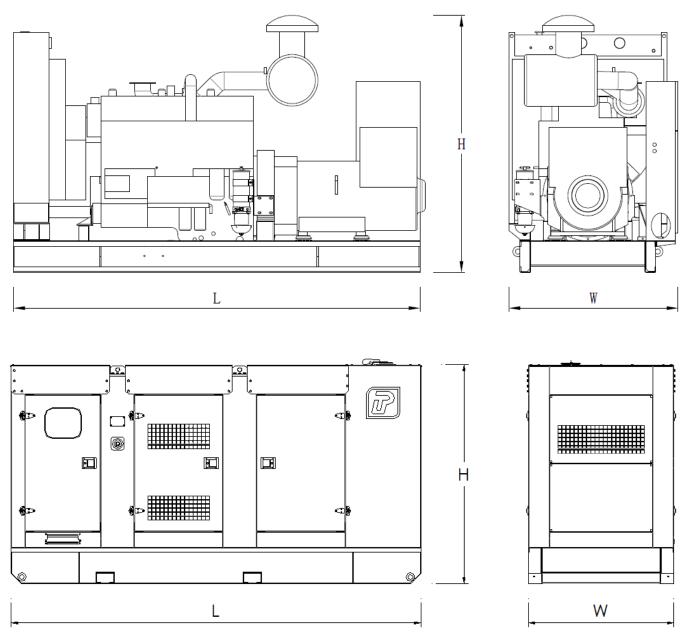
Data sheet of Genset



Genset				
Model	PYC190A			
Prime Rating (kw)	140			
Standby Rating (kw)	150			
Rate voltage(V)	400			
Rate current(A)	253			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	YC6A230-D30			
Gross Engine output-Prime (kw)	155			
Gross Engine output-Standby (kw)	171			
Bore * stroke (mm)	108*132			
Cylinders and structure	6 In line			
Displacement(Liter)	7.255			
Compression Ratio	17.5:1			
Intake way	Supercharge/Air-air intercooling			
Max intake resistance (KPa)	5			
Air intake (m3/h)	666			
Max exhaust back pressure (KPa)	10			
Exhaust gas flow (m3/h)	1860			
Exhaust temp (°C)	480			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min)	277			
Coolant capacity (L)	55			
Highest water temperature(°C)	97			
Minimum air opening to room (m2)	2.0/1.8			
Thermostat range (°C)	70-80			
Max ail temporature (°C)	120			
Lubrication system oil capacity (L)	21			
Rate load fuel consumption(L/H)	39.8			
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 GC7110.2			

Dimension and Weight





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	2517*1070*1343	1805	250
Silent Type	3500*1245*2052	3065	550

Contact Us

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