

PYC150A

Prime Power: 100KW/125KVA Standby Power: 120KW/150KVA Voltage: 400VAC

Powered by Yuchai YC4A180L-D20 Engine

Genset Performance

- 230/400VAC, 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 ≤+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
 - Built-in vibration isolator with high performance on

Standard Configuration

- Cummins 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

shock absorption.

- 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
- Soundproof canopy
- Trailer
- Design and construction of environmental protection
- Engineering for the Genset room

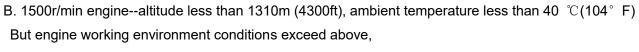


Equipment Instruction



Diesel Engine

- Model: YC4A180L-D20
- Construction: High strength cylinder block, reinforced crankshaft and alloy steel connecting rod make the engine more durable and have lighter and more compact structure in similar products.
- The engine body and other main structures have been long tested to ensure the high reliability of the whole machine.
- Integrated cylinder head and water outlet main pipe design, reduce sealing cover and improve sealing reliability.
- Environment: The engine can work normally under the following conditions without de-rating:
 - A. 1800r/min engine--altitude less than 1500m (5000ft), ambient temperature less than 40 $\,^{\circ}$ C (104 $^{\circ}$ F).



the engine output power will de-rate 4% as altitude increase each 300m(1000ft) at the altitude is higher than 1500m (5000ft),

Also it will de-rate 2% as temperature increase every 11 $\,^{\circ}$ C(1% de-rating ,when temperature increase each 10 $^{\circ}$ F). in the ambient temperature is higher than 40 $\,^{\circ}$ C(104 $^{\circ}$ F)



- 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
- 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 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

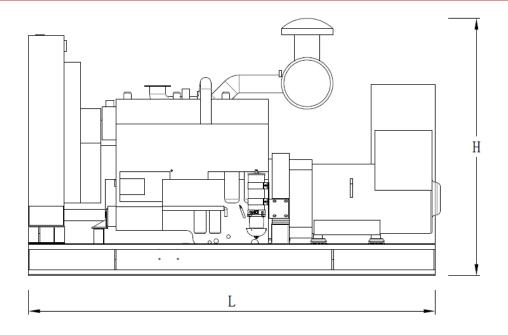
Data sheet of Genset

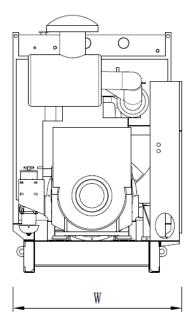


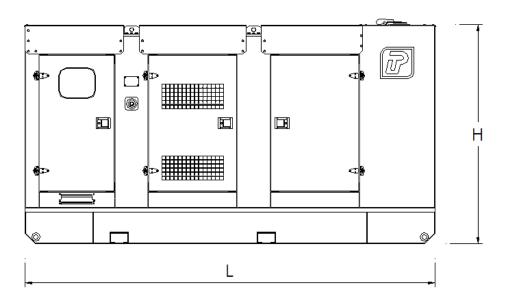
Genset				
Model	PYC150A			
Prime Rating (kw)	100			
Standby Rating (kw)	120			
Rate voltage(V)	400			
Rate current(A)	180			
Power factor	0.8			
Frequency(Hz)	50			
Engine				
Engine Model	YC4A180L-D20			
Gross Engine output-Prime (kw)	120			
Gross Engine output-Standby (kw)	132			
Bore * stroke (mm)	108*132			
Cylinders and structure	4 In line			
Displacement(Liter)	4.837			
Compression Ratio	17.5:1			
Intake way	Turbo Charge			
Max intake resistance (KPa)	5			
Air intake (m3/h)	430			
Max exhaust back pressure (KPa)	10			
Exhaust gas flow (m3/h)	1140			
Exhaust temp (°C)	550			
Cooling way	Water Radiator & Fan			
Fan exhaust flow (m3/min) 186				
Coolant capacity (L)	31			
	99			
Minimum air opening to room (m2)	1.45/1.3			
Thermostat range (°C)	70-80			
May ail temperature (°C)	115			
Lubrication system oil capacity (L)	13			
Rate load fuel consumption(L/H)	29.9			
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 H				
Controller				
Brand	POWERTEC GC6110			

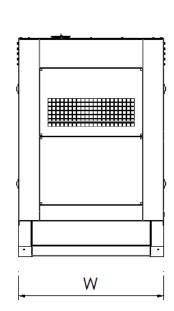
Dimension and Weight











Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	2360*1095*1691	1490	200
Silent Type	2920*1100*1750	2240	400

Contact Us

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