



PYC80A

Prime Power: 60KW/75KVA Standby Power: 64KW/80KVA Voltage: 400VAC

Powered by Yuchai YC4D105-D34 Engine

Genset Performance

| 230//00\/&C | 50Hz, 0.8PF, 3 Pha | acae /I wirae |
|-------------|--------------------|---------------|
| | | |

■ 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

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.



Equipment Instruction



Diesel Engine

- Model: PYC80A-YC4D105-D34
- 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.
- Intake:Turbo charged
- 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.
- 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.
- Good filter transient state and strong loading capacity, which can meet the requirement of G3 grade of genset performance.
- Two-stage fuel filter with alarm function is adopted to ensure the operation.
- Conform to non-road country T3 and European S3A standards.



The engine can work under the following conditions without modulating power:

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.





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

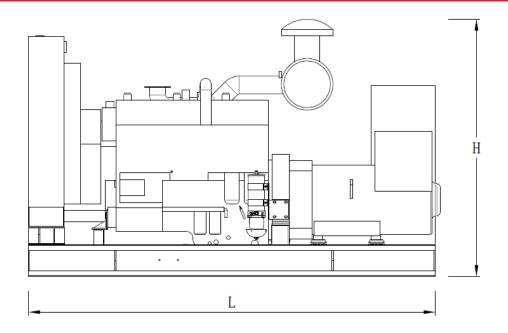
Data sheet of Genset

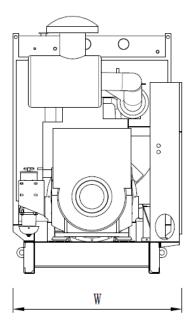


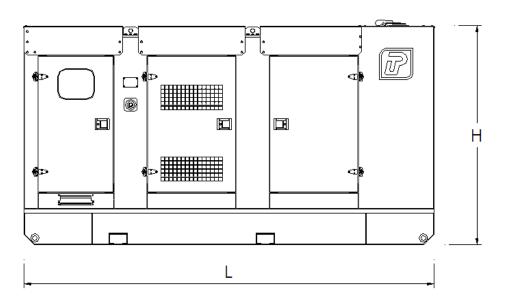
| Genset | | | | | | |
|-------------------------------------|-------------------------|--|--|--|--|--|
| Model | PYC80A | | | | | |
| Prime Rating (kw) | 60 | | | | | |
| Standby Rating (kw) | 64 | | | | | |
| Rate voltage(V) | 400 | | | | | |
| Rate current(A) | 108 | | | | | |
| Power factor | 0.8 | | | | | |
| Frequency(Hz) | 50 | | | | | |
| Engine | | | | | | |
| Engine Model | YC4D105-D34 | | | | | |
| Gross Engine output-Prime (kw) | 70 | | | | | |
| Gross Engine output-Standby (kw) | 77 | | | | | |
| Bore * stroke (mm) | 108*115 | | | | | |
| Cylinders and structure | 4 In line | | | | | |
| Displacement(Liter) | 4.214 | | | | | |
| Compression Ratio | 17.5:1 | | | | | |
| Intake way | Turbocharging | | | | | |
| Max intake resistance (KPa) | 5 | | | | | |
| Air intake (m3/h) | 290 | | | | | |
| Max exhaust back pressure (KPa) | 10 | | | | | |
| Exhaust gas flow (m3/h) | 810 | | | | | |
| Exhaust temp (°C) | 553 | | | | | |
| Cooling way | Water Radiator & Fan | | | | | |
| Fan exhaust flow (m3/min) | 160.4 | | | | | |
| Coolant capacity (L) | 22 | | | | | |
| | 97 | | | | | |
| Minimum air opening to room (m2) | 1.5/1.0 | | | | | |
| | 70-80 | | | | | |
| Thermostat range (°C) | 120 | | | | | |
| Lubrication system oil capacity (L) | 13 | | | | | |
| Rate load fuel consumption(L/H) | 19.6 | | | | | |
| Standard Governor/Class | Electronic | | | | | |
| Alteri | nator | | | | | |
| 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 | | | | | |

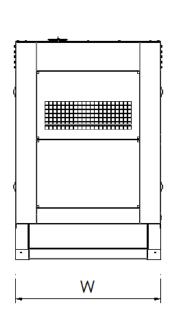
Dimension and Weight











| Туре | Dimension (mm) (L*W*H) | Weight (kg) | Fuel Tank Capacity (L) |
|-------------|---------------------------|----------------|---------------------------|
| Open Type | 2200*850*1350 | 1100 | 200 |
| Silent Type | 2920*1100*1750 | 1850 | 400 |

Contact Us

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