



PYC350B

Prime Power: 250KW/313KVA Standby Power: 280KW/350KVA Voltage: 400V

Doward by Vuchai VC6MK4201 D20 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 ≤+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.

Product standards: (1) GB/T 2820-2022 / IS08528:2018
(2) GB/T 4712-2008 (3) YD/T 502-2020 (4)YD/T 1051-2018

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
- Bottom fuel tank
- 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



Equipment Instruction



Diesel Engine

- Model: YC6MK420L-D20
- YC6MK series engines are developed and designed with internationally advanced design concept and methods as well as several technological achievements in modern diesel engine research. The engine has strong power, reliable quality, high efficiency and fuel efficiency, and its indicators reach the internationally advanced level;
- Integral crankcase and integral cylinder head are adopted, which ensure good reliability. Wet cylinder liner is adopted, which ensures the wear resistant and easy maintenance.
- The advanced technology of four-valve + high-efficiency turbocharged & intercooled is adopted, ensuring sufficient air inflow and sufficient combustion at low fuel consumption;
- The internal cooling oil passage technology is adopted for piston, the engine oil flowing through the piston removes the piston heat in time so that the piston can withstand higher combustion temperature, making the engine highly reliable.
- Special piston seal technology and valve oil seal technology are adopted, making the engine oil consumption low.
- G3 performance requirements for generator set are met.



- 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.



Intelligent Control System



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;.

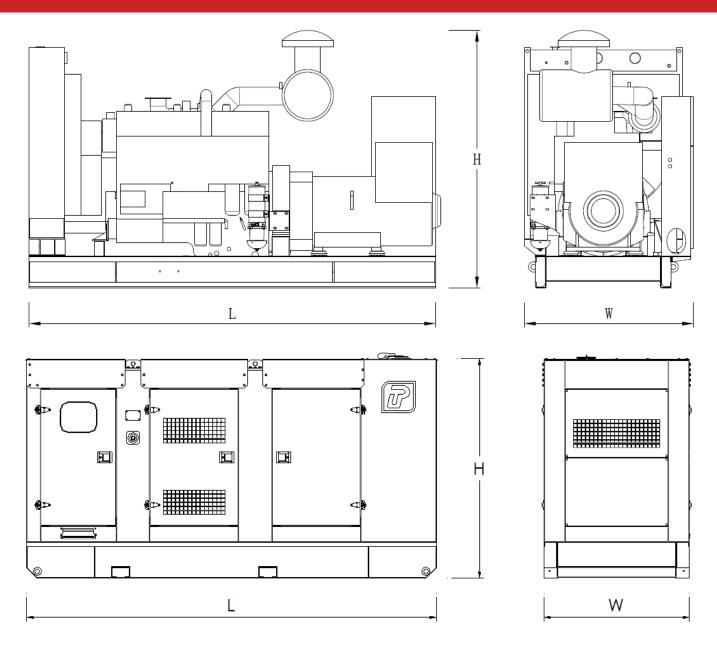
Data sheet of Genset



| Genset | | | | | | | |
|-------------------------------------|----------------------------|--|--|--|--|--|--|
| Model | PYC350B | | | | | | |
| Prime Rating (kw) | 250 | | | | | | |
| Standby Rating (kw) | 280 | | | | | | |
| Rate current(A) | 451 | | | | | | |
| Power factor | 0.8 | | | | | | |
| Frequency(Hz) | 50 | | | | | | |
| Engine | | | | | | | |
| Engine Model | YC6MK420L-D20 | | | | | | |
| Gross Engine output-Prime (kw) | 281 | | | | | | |
| Gross Engine output-Standby (kw) | 309 | | | | | | |
| Bore * stroke (mm) | 123*145 | | | | | | |
| Cylinders and structure | 6 In line | | | | | | |
| Displacement(Liter) | 10.34 | | | | | | |
| Compression Ratio | 16.8:1 | | | | | | |
| Intake way | Turbocharged & Intercooled | | | | | | |
| Max intake resistance (KPa) | 5 | | | | | | |
| Air intake (m3/h) | 1098 | | | | | | |
| Max exhaust back pressure (KPa) | 10 | | | | | | |
| Exhaust gas flow (m3/h) | 2886 | | | | | | |
| Exhaust temp (°C) | 580 | | | | | | |
| Cooling way | Water Radiator & Fan | | | | | | |
| Fan exhaust flow (m3/min) | 612 | | | | | | |
| Coolant capacity (L) | 65 | | | | | | |
| Highest water temperature(℃) | 99 | | | | | | |
| Minimum air opening to room (m2) | 1.8/1.5 | | | | | | |
| Thermostat range (℃) | 80-90 | | | | | | |
| Max oil temperature (℃) | 120 | | | | | | |
| Lubrication system oil capacity (L) | 30 | | | | | | |
| Rate load fuel consumption(L/H) | 68.6 | | | | | | |
| Standard Governor/Class | electronic | | | | | | |
| Emission | China Tier 2 | | | | | | |
| Altern | 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





| Туре | Dimension (mm) (L*W*H) | Weight (kg) | Fuel Tank Capacity (L) |
|-------------|---------------------------|----------------|---------------------------|
| Open Type | 2974*1197*1614 | 2460 | _ |
| Silent Type | 3950*1400*2115 | 3860 | 750 |

Contact Us

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