

## **PYC375B**

Prime Power: 280KW/350KVA Standby Power: 300KW/375KVA Voltage: 400V

### Powered by Yuchai YC6MK450-D30 Engine

### **Genset Performance**

230/400V	50Hz, 0.8PF, 3 Phases 4 w	/ires

■ 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</p>

TIF (Telephone Influence Factor) <50</li>
 Comply to Standard NEMA MG1-22.43

Standard equipped with ambient temperature 40 ℃
 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
- 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.



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## **Equipment Instruction**



### **Diesel Engine**

■ Model: YC6MK450-D30

Structure: High-strength cylinder block, reinforced crankshaft, and alloy steel connecting rods make the engine more durable and have a lighter and more compact structure among similar products:

- It adopts advanced and mature electronically controlled high-pressure common rail + high-efficiency supercharging and intercooling technology to accurately control the fuel injection volume and sufficient air intake to ensure that the diesel engine has sufficient combustion, low fuel consumption and low emissions under different load conditions.
- Using a full-flow oil cooler, the heat dissipation efficiency is increased by 30%, effectively reducing the temperature of the oil, allowing the oil to lubricate parts at a reasonable temperature and reducing friction losses;
- The piston is cooled by an internal cooling oil channel, which effectively reduces the piston temperature and has a long service life;
- Meet the G3 level requirements for generator set performance;
- Yuchai YC6MK series engines have gone through ten years of market testing and are widely used in heavy-duty buses, heavy-duty trucks, engineering machinery, ships and generator sets. After upgrading to the electronically controlled high-voltage common rail configuration, emissions meet the third stage non-road requirements with sufficient margin, stronger power, lower fuel consumption, and better transient loading capability.

#### **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 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.



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## **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;.

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## **Data sheet of Genset**



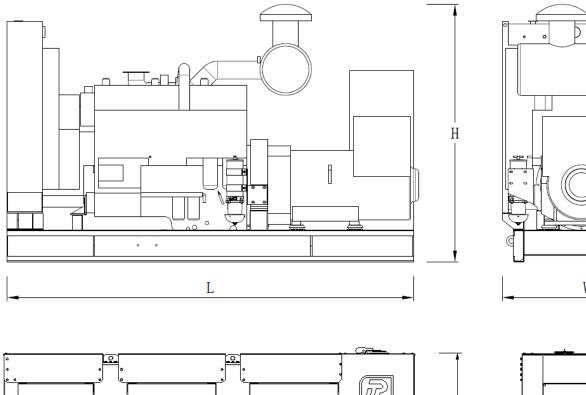
Model	PYC375B						
Prime Rating (kw)	280						
Standby Rating (kw)	300						
Rate current(A)	505						
Power factor	0.8						
Frequency(Hz)	50						
Engine							
Engine Model	YC6MK450-D30						
Gross Engine output-Prime (kw)	301						
Gross Engine output-Standby (kw)	331						
Bore * stroke (mm)	123*145						
Cylinders and structure	6 In line						
Displacement(Liter)	10.338						
Compression Ratio	16.8:1						
Intake way	Supercharge/Air-Air intercooling						
Max intake resistance (KPa)	5						
Air intake (m3/h)	1146						
Max exhaust back pressure (KPa)	10						
Exhaust gas flow (m3/h)	3042						
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)	1.9/1.6						
Thermostat range (℃)	80-90						
Max oil temperature (℃)	120						
Lubrication system oil capacity (L)	28						
Rate load fuel consumption(L/H)	72.6						
Standard Governor/Class	Electronically controlled high voltage common rail						
Emission	China Tier 3						
Alternator							
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						

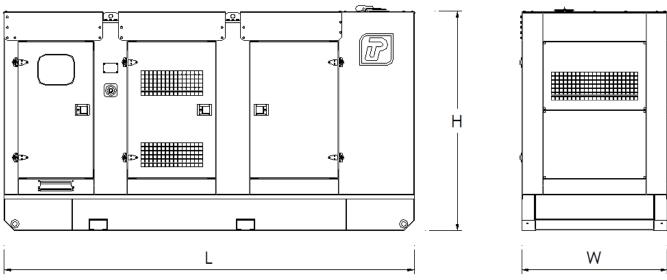
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# **Dimension and Weight**



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Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3051*1368*1619	2920	_
Silent Type	3950*1400*2115	4320	750

## Contact Us

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