POWERTEC
Powertec Generator System Inc.

玉柴机器 YC DIESEL

PYC375B

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

Powered by Yuchai YC6MK450-D30 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 ≤±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℃ Connecting radiator
- Built-in vibration isolator with high performance on shock absorption.

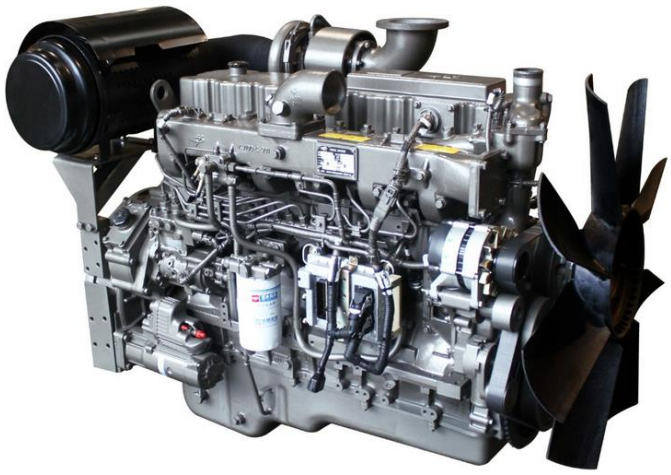
Standard Configuration

- Guangxi Yuchai Engine
- Brushless synchronous alternator
- POWERTEC intelligent controller
- 40℃ standard ambient temperature （50℃ 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.

Diesel Engine



- Model：PYC375B-YC6MK450-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.
- Adopt German FEV technology platform; Reliability, fuel consumption and other main performance indicators reach the advanced level in China; 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 ℃

1500r/min engine--altitude less than1000 m, ambient temperature less than 40 ℃

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 with BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.

Notes: Above data of alternator comes from Stamford. Specification may alternated without advance notice.

Standard

- 3 phases voltage: Ua, Ub, Uc
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature ℃ display
- Oil pressure OP
- Engine speed
- 3 phases current: La, Lb, Lc
- Active power PA
- Power factor PF
- Temperature ℃ display
- KPa/Psi/Bar display
- Battery voltage V
- Running Hour
- Starting timer:(999999)

Standard Protection

Genset Protection

- Programmable I/O signal
- Emergency stop

Engine Protection

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail

Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost
- Over Voltage
- Over frequency
- Under frequency

Control System Components

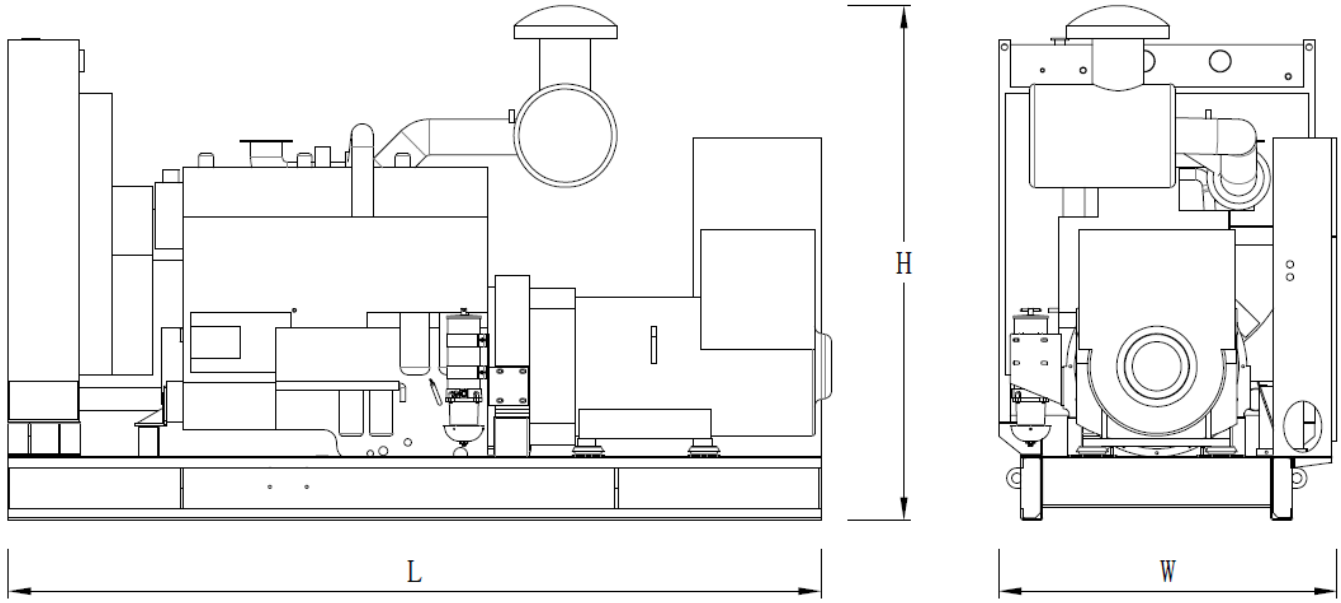
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer

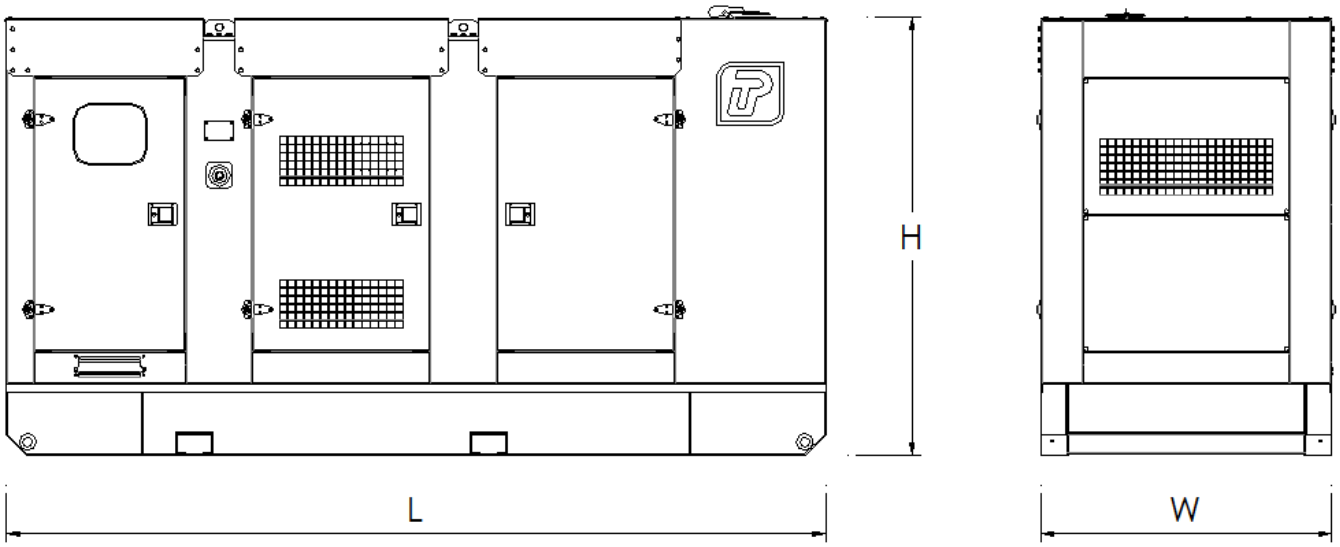
Communication Interface （Option）

- 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

Genset	
Model	PYC375B
Prime Rating (kw)	280
Standby Rating (kw)	300
Rate voltage(V)	400
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	Charge inter-cooling
Max intake resistance (KPa)	5
Air intake (m3/h)	1146
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	3042
Exhaust temp (℃)	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)	2.3/2.1
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	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 GC7110.2





Type	Dimension (mm) （L*W*H）	Weight (kg)	Fuel Tank Capacity (L)
Open Type	3051*1368*1619	2920	-
Silent Type	3950*1400*2115	4320	600

Contact Us

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