

PYC140A

Prime Power: 100KW/125KVA

Standby Power: 110KW/138KVA

Voltage: 400V

Powered by Yuchai YC6B180L-D20 Engine

Genset Performance

- 230/400V, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop $\leq 3\%$
- Voltage regulation $\leq 0.3\%$
- The steady state frequency $\leq 0.5\%$
- The steady state voltage deviation $\leq \pm 1\%$
- The transient frequency deviation $\leq +10\% \leq -15\%$
- The transient voltage deviation $\leq +20\% \leq -15\%$
- Frequency recovery time $\leq 3S$
- Voltage recovery time $\leq 1S(\text{Voltage} \pm 3\%)$
- 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 / ISO8528:2018
(2) GB/T 4712-2008 (3) YD/T 502-2020 (4) YD/T 1051-2018

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

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



Diesel Engine

- Model: YC6B180L-D20
- YC6B series engine is a classic power product developed by Yuchai, with high brand awareness and market. The recognition is high, and the engine for generator set developed on this basis has the advantages of reliability and durability, energy saving and environmental protection, compact structure, strong transient loading capacity and good maintainability.;
- Structure: made of high-strength alloy cast iron, with better rigidity, less vibration and noise; Wet cylinder liner, easy to maintain.
- The main structural components of the engine, such as its casing, have withstood extensive testing, ensuring the high reliability of the entire unit.;
- Adopt imported technology supercharger and high-efficiency intercooler.
- The main performance indexes such as reliability and fuel consumption have reached the domestic advanced level.
- Adopt full-flow oil cooler, improve heat dissipation efficiency by 30%, effectively reduce oil temperature, Oil lubricates parts at a reasonable temperature to reduce friction loss.
- The piston is cooled by internal cooling channels, which effectively reduces its temperature and extends its service life.



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 satisfy tough environment.
- Rotor dynamic balancing complies for BS5625, class 2.5
- Sealed with advanced lubricating grease to prolong life of bearing.



Standard Meters

- 3 phases voltage: U_a, U_b, U_c
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature $^{\circ}\text{C}$ display
- Oil pressure OP
- Engine speed
- 3 phases current: I_a, I_b, I_c
- Active power PA
- Power factor PF
- Temperature $^{\circ}\text{C}$ display
- KPa/Psi/Bar display
- Battery voltage V
- Running Hour
- Starting timer:(999999)



Standard Protection Function

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

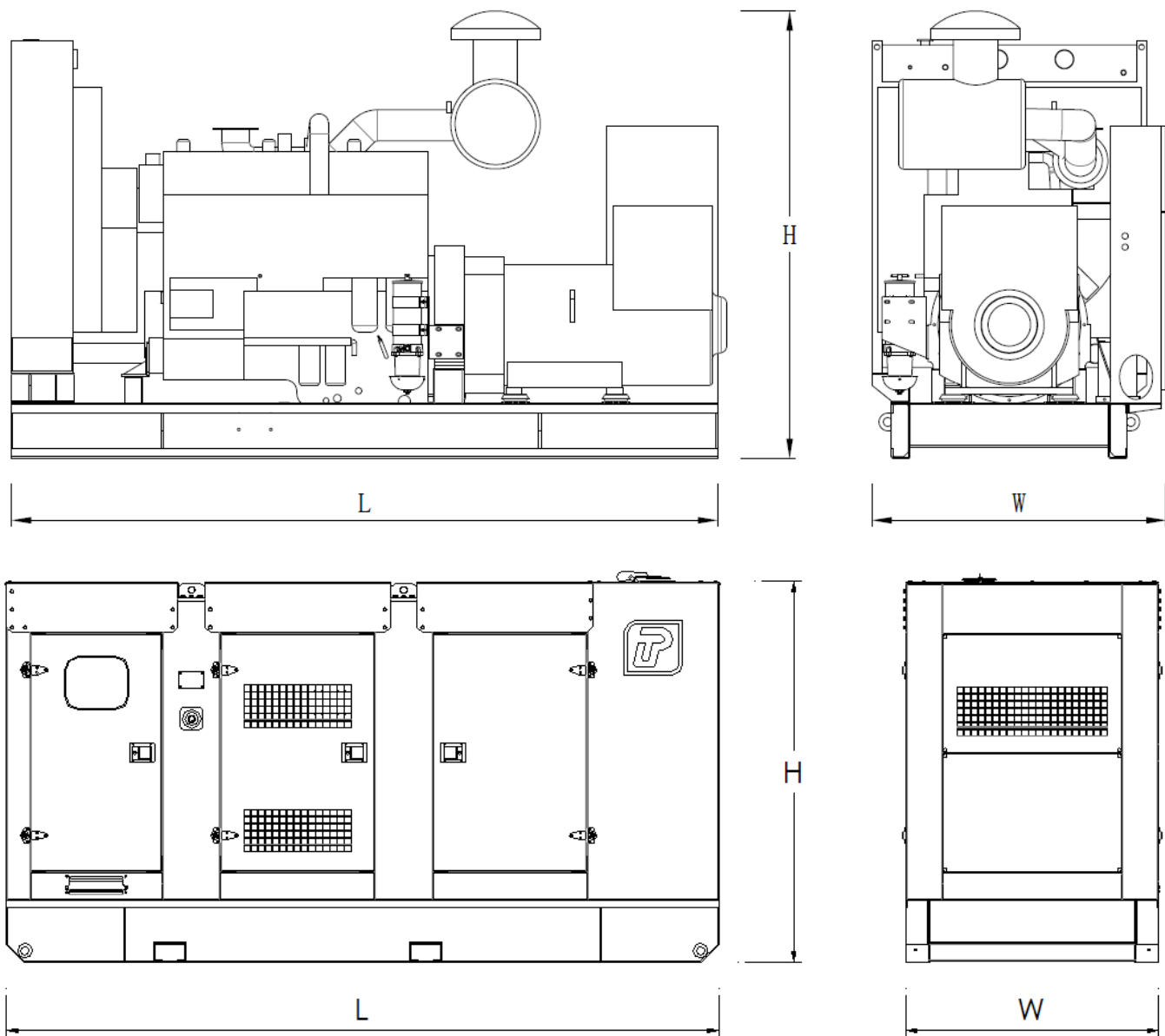
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



Communication Interface (Option)

- International standard MODBUS communication protocol RS232/ RS485 is suitable for remote control and monitor; It is easy integrated with SCADA;.

Genset	
Model	PYC140A
Prime Rating (kw)	100
Standby Rating (kw)	110
Rate current(A)	180
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	YC6B180L-D20
Gross Engine output-Prime (kw)	120
Gross Engine output-Standby (kw)	132
Bore * stroke (mm)	108×125
Cylinders and structure	6 In line
Displacement(Liter)	6.87
Compression Ratio	17.5:1
Intake way	Turbocharged & Intercooled
Max intake resistance (KPa)	5
Air intake (m3/h)	457.8
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	1068
Exhaust temp (°C)	477
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	164
Coolant capacity (L)	31
Highest water temperature(°C)	99
Minimum air opening to room (m2)	1.3/1.1
Thermostat range (°C)	70-80
Max oil temperature (°C)	115
Lubrication system oil capacity (L)	17
Rate load fuel consumption(L/H)	28.5
Standard Governor/Class	electronic
Emission	China Tier 2
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	H
Controller	
Brand	POWERTEC



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	2510*975*1586	1800	200
Silent Type	2920*1100*1750	2550	300

Contact Us

Powertec Generator System Inc.

Add: Danshui Yanna Industry Zone, Huiyang, Huizhou, Guangdong, China
Tel: +86 752-3911119 / 3911118
Fax: +86 752-3911110
Web: www.powertec.com.cn
Email: powertec@powertec.com.cn