

PYC140A

Prime Power: 100KW/125KVA

Standby Power: 110KW/138KVA

Voltage: 400V

Powered by Yuchai YC4A180L-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: YC4A180L-D20
- YC4A series engines are classic power products developed by Yu chai, with high brand awareness and market. The generator set developed on the basis of high recognition and market possession of more than 500,000 sets is used for power generation. The motive is reliable and durable, energy-saving and environment-friendly, compact in structure, strong in transient loading capacity and easy to maintain. Good sex and other advantages;
- Structure: made of high-strength alloy cast iron, with better rigidity, less vibration and noise; Wet cylinder liner is easy to maintain and has a lighter and more compact structure in similar products.
- The main structural components of the engine, such as its casing, have withstood extensive testing, ensuring the high reliability of the entire unit ;
- Optimization of the damping and shock-absorbing gears as well as the gear box structure results in low noise levels for the entire machine.
- Adopt mature mechatronics and high-efficiency supercharging technology, effectively control the fuel injection quantity and ensure sufficient air intake. Ensure that the diesel engine burns fully and emits less under different loads.;
- When adopting electronic speed regulation, it can meet the requirements of G3 grade of generator set performance;



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 complys 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

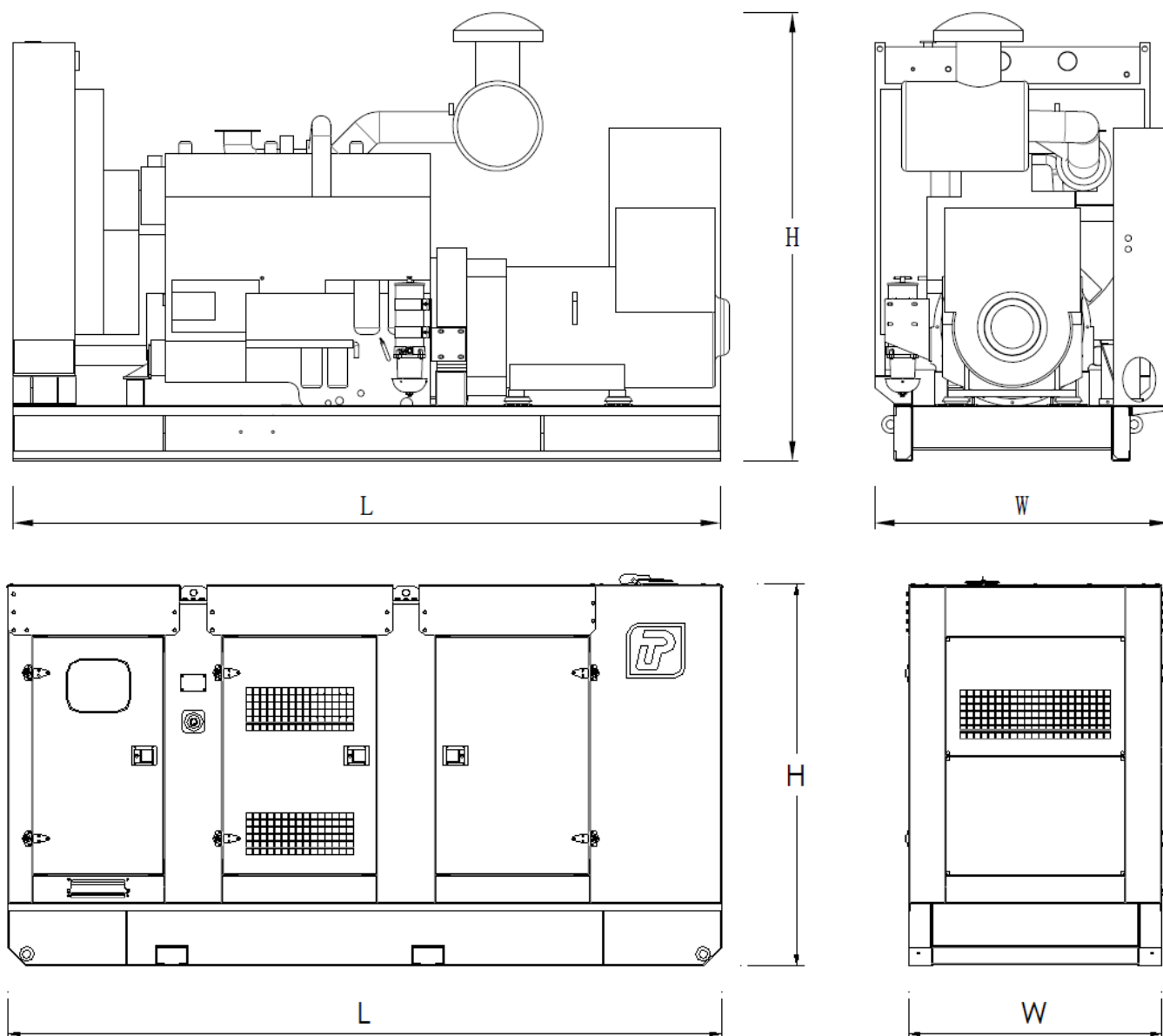
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



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	YC4A180L-D20
Gross Engine output-Prime (kw)	120
Gross Engine output-Standby (kw)	132
Bore * stroke (mm)	108×132
Cylinders and structure	4 In line
Displacement(Liter)	4.84
Compression Ratio	17.5:1
Intake way	Turbocharged & Intercooled
Max intake resistance (KPa)	5
Air intake (m3/h)	552
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	1344
Exhaust temp (°C)	580
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	175
Coolant capacity (L)	27
Highest water temperature(°C)	97
Minimum air opening to room (m2)	1.1/0.9
Thermostat range (°C)	70-80
Max oil temperature (°C)	120
Lubrication system oil capacity (L)	17
Rate load fuel consumption(L/H)	28.9
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	2360*1095*1691	1490	200
Silent Type	2920*1100*1750	2240	300

Contact Us

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