

# PYC45A

Prime Power: 30KW/38KVA

Standby Power:33KW/41KVA

Voltage: 400V

Powered by Yuchai YC4D60 D35 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 / IS08528:2018  
(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: YC4D60-D25
- YC4D series engines are classic power products developed by Yuchai, with high brand awareness, market recognition and large market share. YC4D60-D25 engine for generator sets has the advantages of reliability and durability, energy saving and environmental protection, compact structure, strong transient loading capacity, and good maintainability..;
- The engine body and other main structures have been tested for a long time, ensuring the high reliability of the entire machine.
- The cylinder head is designed with an integrated water outlet pipe to reduce the sealing surface and improve sealing reliability.sex;
- It adopts mature mechanical and electronic control technology to effectively control the fuel injection volume and sufficient air intake to ensure that the diesel engine has sufficient combustion and low emissions under different load conditions.
- It has good transient speed regulation and strong loading capacity, meeting the G3 performance requirements of the generator set.;
- Adopt high-efficiency filtration diesel filter, operation is more secure;
- Parts have good versatility, high degree of serialization, one cylinder and one cover structure, and low comprehensive maintenance costs.;



## 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  $^{\circ}C$  display
- Oil pressure  $OP$
- Engine speed
- 3 phases current:  $I_a, I_b, I_c$
- Active power  $PA$
- Power factor  $PF$
- Temperature  $^{\circ}C$  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

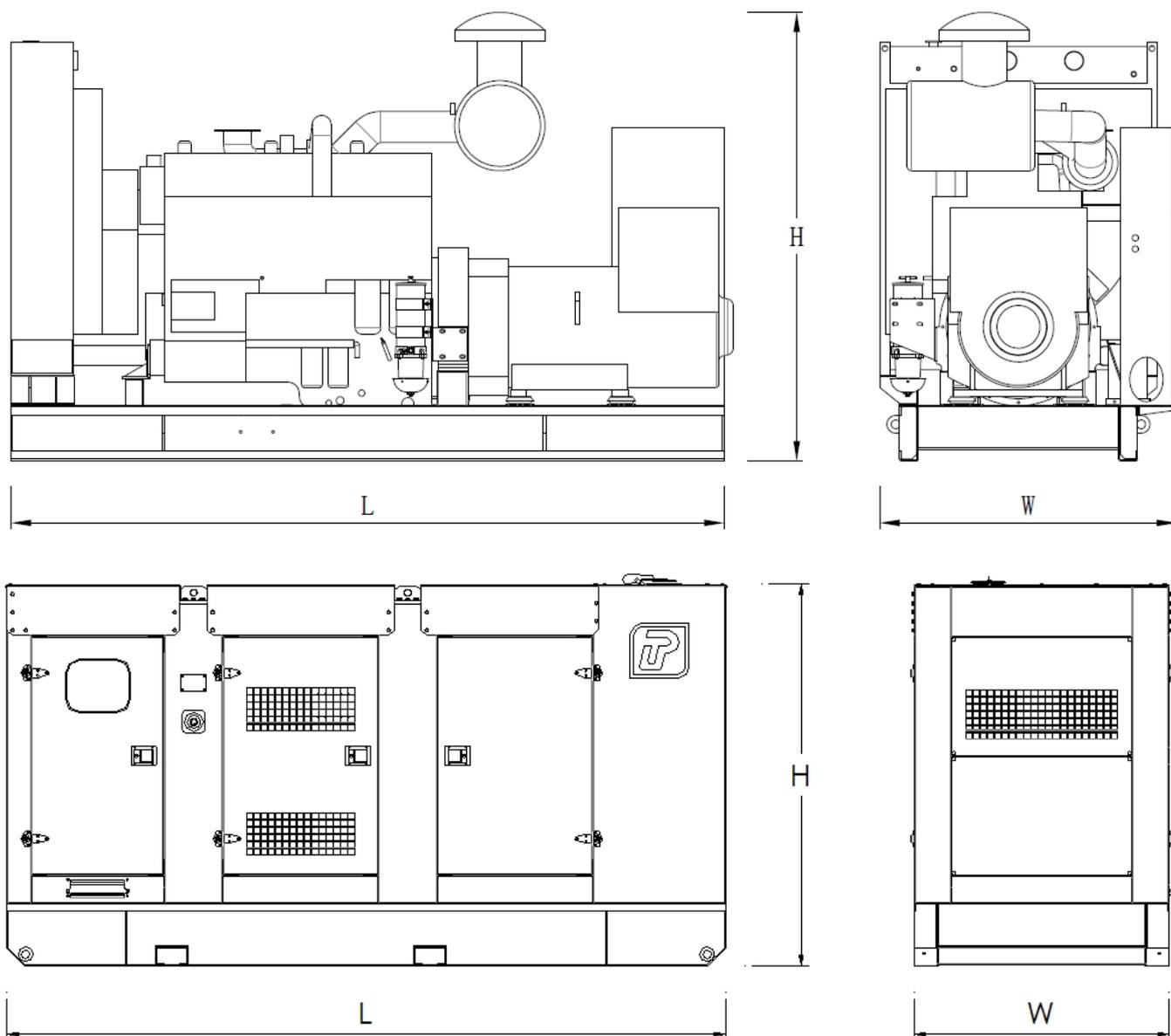
- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



## Communication Interface (Option)

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

<b>Genset</b>	
Model	PYC45A
Prime Rating (kw)	30
Standby Rating (kw)	33
Rate current(A)	54
Power factor	0.8
Frequency(Hz)	50
<b>Engine</b>	
Engine Model	YC4D60-D25
Gross Engine output-Prime (kw)	40
Gross Engine output-Standby (kw)	44
Bore * stroke (mm)	102*118
Cylinders and structure	4 In line
Displacement(Liter)	3.86
Compression Ratio	17.5:1
Intake way	inhale naturally
Max intake resistance (KPa)	5
Air intake (m3/h)	150
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	120
Exhaust temp (°C)	650
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	91
Coolant capacity (L)	22
Highest water temperature(°C)	97
Minimum air opening to room (m2)	0.7/0.6
Thermostat range (°C)	70-80
Max oil temperature (°C)	120
Lubrication system oil capacity (L)	10
Rate load fuel consumption(L/H)	10.5
Standard Governor/Class	electronic
Emission	China Tier 2
<b>Alternator</b>	
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
<b>Controller</b>	
Brand	POWERTEC



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	2030*883*1253	835	110
Silent Type	2300*900*1550	1385	160

## Contact Us

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