

# PYC55A

Prime Power: 40KW/50KVA

Standby Power: 44KW/55KVA

Voltage: 400V

Powered by Yuchai YCD4V33H6-75 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

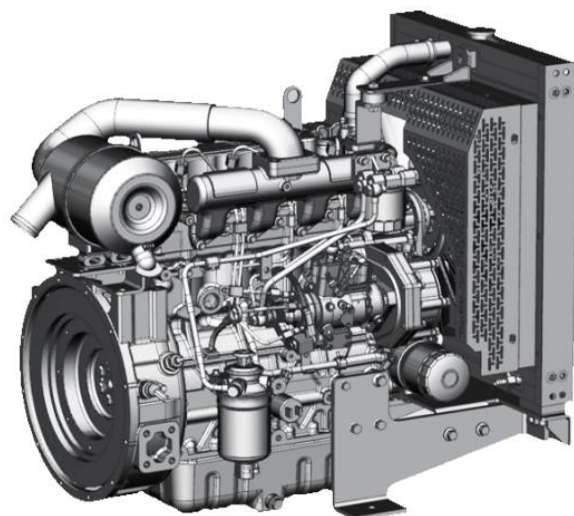
- Starting batteries
- Fuel tank
- Oil-water separator
- Sensor for low coolant level, low fuel/oil level
- Automatically monitoring & controlling system of city power
- Coolant heater
- Oil heater
- Heat exchanger--Water cooled tower system
- Silent type/Trailer
- Standardized container
- Design and construction of environmental protection; engineering for the Genset room.

## 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: YCD4V33H6-75
- YCD4V series engines are key control subsidiaries of Guangxi Yuchai Machinery Group Co., Ltd. The model produced by Guangxi Yuchai Power Co., Ltd. is a small-bore multi-cylinder diesel engine produced by Yuchai Group. The production base of diesel engines has the annual production capacity of 300,000 units of multi-cylinder small-bore diesel engines;
- The engine has compact structure, small size, light weight and easy maintenance on one side;
- Tunnel-type linerless body has good rigidity and low oil consumption (the engine-fuel ratio is less than 0.1%);
- Electronically controlled fuel supply system, low swirl ratio air passage, multi-hole small-diameter injector, strong power, Excellent performance and good economy;
- NVH optimization, low noise and vibration, reaching the advanced level of similar international models;
- Can be relayed and remotely monitored, easy to operate; the machine filter and diesel filter are arranged on the same side, easy to maintain;
- Adopt internationally renowned brand fuel pump;



## 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;.

## Genset

|                     |        |
|---------------------|--------|
| Model               | PYC55A |
| Prime Rating (kw)   | 40     |
| Standby Rating (kw) | 44     |
| Rate current(A)     | 72     |
| Power factor        | 0.8    |
| Frequency(Hz)       | 50     |

## Engine

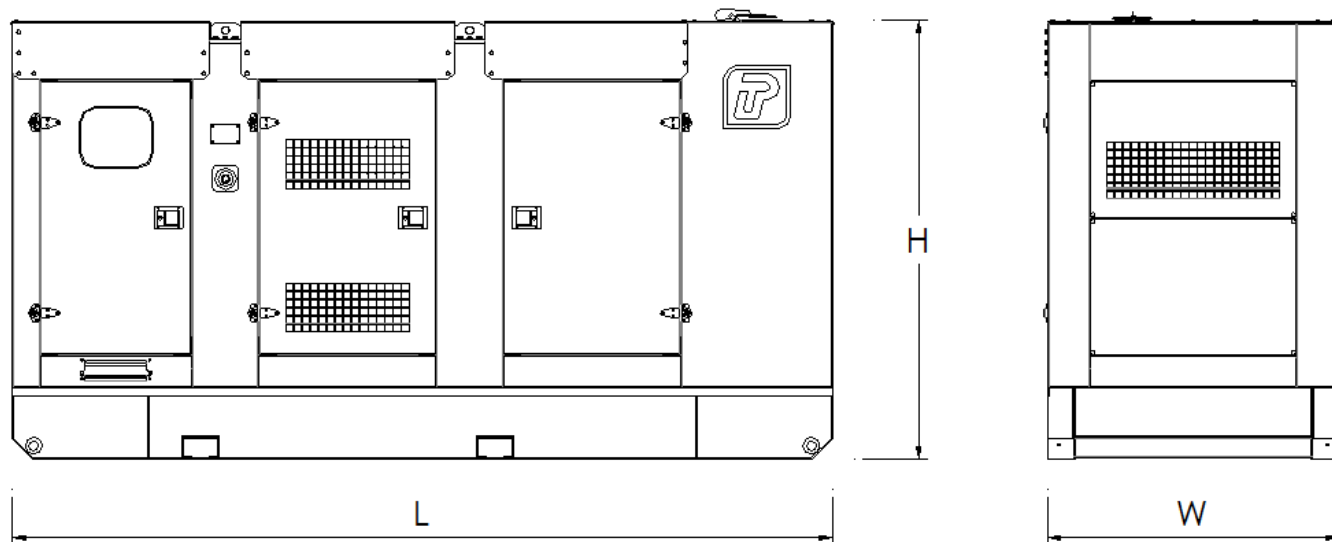
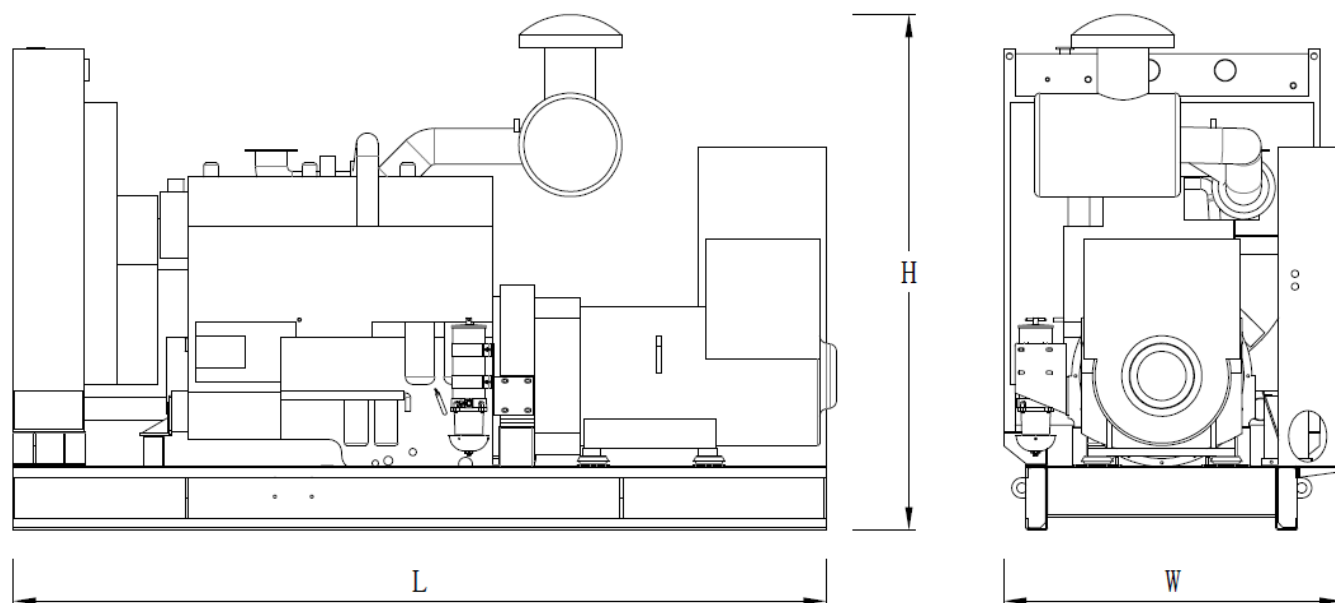
|                                     |  |
|-------------------------------------|--|
| Engine Model                        | YCD4V33H6-75                                       |
| Gross Engine output-Prime (kw)      | 50   |
| Gross Engine output-Standby (kw)    | 55   |
| Bore * stroke (mm)                  | 89*100   |
| Cylinders and structure             | 4 In line  |
| Displacement(Liter)                 | 2.5  |
| Compression Ratio                   | 17.5:1   |
| Intake way                          | turbocharging                                      |
| Max intake resistance (KPa)         | 5  |
| Air intake (m3/h)                   | 244  |
| Max exhaust back pressure (KPa)     | 10   |
| Exhaust gas flow (m3/h)             | 678  |
| Exhaust temp (°C)                   | 490  |
| Cooling way                         | Water Radiator & Fan                               |
| Fan exhaust flow (m3/min)           | 160.4  |
| 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) | 6.5  |
| Rate load fuel consumption(L/H)     | 13   |
| 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       | H                       |

## Controller

|       |          |
|-------|----------|
| Brand | POWERTEC |
|-------|----------|



| Type        | Dimension (mm)<br>(L*W*H) | Weight<br>(kg) | Fuel Tank Capacity<br>(L) |
|-------------|---------------------------|----------------|---------------------------|
| Open Type   | 2000*850*1250             | 920            | 110                       |
| Silent Type | 2920*1100*1750            | 1670           | 300                       |

**Contact Us**

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