



# PYC30A

Prime Power: 20KW/25KVA

## Standby Power: 22KW/28KVA

### Voltage: 400V

Powered by Yuchai YCDV254FHZ-35 Engine

## **Genset Performance**

- 230/400V, 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  $\leq \pm 1\%$
- The transient frequency deviation  $\leq$ +10%  $\leq$ -15%
- The transient voltage deviation ≤+20% ≤-15%
  - Frequency recovery time S3S
- Voltage recovery time

- THF (Telephone Harmonic Factor) <3
- TIF (Telephone Influence Factor) <50</li>
  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.

 $\leq$ 1S(Voltage $\pm$ 3%)

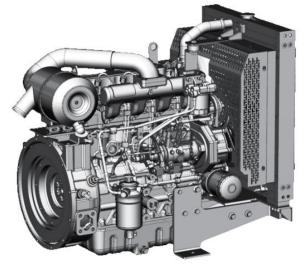
## **Standard Configuration**

- 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: YCDV254FHZ-35
- YCD4 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 satify 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: Ua, Ub, Uc
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- Oil pressure OP
- Engine speed

- 3 phases current: La, Lb, Lc
- Active power PA
- Power factor PF
- Temperature °C display
- KPa/Psi/Bar display
- Battery voltage V
- **Running Hour**
- Starting timer: (999999)



### **Standard Protection Function**

#### **Genset Protection**

Programmable I/O signal 

#### **Engine Protection**

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail

#### **Alternator Protection**

- **Over Voltage**
- Over current
- Voltage signal lost

#### **Control System Components**

- Manual/auto/stop/start
- Setting button
- Fault status indicators

- Emergency stop
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail
- **Over Voltage**

- 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;.

- - - **Over frequency**
    - Under frequency

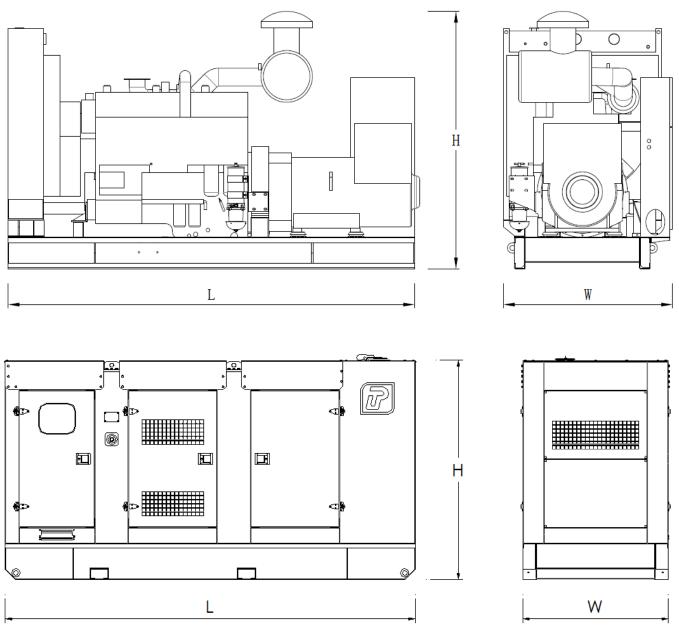
# **Data sheet of Genset**



Genset			
Model	PYC30A		
Prime Rating (kw)	20		
Standby Rating (kw)	22		
Rate current(A)	36		
Power factor	0.8		
Frequency(Hz)	50		
Engine			
Engine Model	YCDV254FHZ-35		
Gross Engine output-Prime (kw)	25		
Gross Engine output-Standby (kw)	27.5		
Bore * stroke (mm)	89*100		
Cylinders and structure	4 In line		
Displacement(Liter)	2.5		
Compression Ratio	17.5:1		
Intake way	Turbocharged & Intercooled		
Max intake resistance (KPa)	5		
Air intake (m3/h)	70		
Max exhaust back pressure (KPa)	10		
Exhaust gas flow (m3/h)	73		
Exhaust temp (℃)	620		
Cooling way	Water Radiator & Fan		
Fan exhaust flow (m3/min)	98.4		
Coolant capacity (L)	10.2		
Highest water temperature(℃)	95		
Minimum air opening to room (m2)	0.7/0.6		
Thermostat range (℃)	71-95		
Max oil temperature (℃)	ature (°C) 125		
Lubrication system oil capacity (L)	6.5		
Rate load fuel consumption(L/H)	6.6		
Standard Governor/Class	Electronically controlled high voltage common rail		
Emission	China Tier 3		
Alterr	nator		
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	Н		
Controller			
Brand	POWERTEC		

# **Dimension and Weight**





Туре	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	1700*800*1200	680	110
Silent Type	2300*900*1550	1250	160

# Contact Us

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