YCA08350-D30

Version No.: 2021V01 Implemented on: 2021-4-20

Prime power: 235 kW @ 1500 r/min

Standby power:259 kW @ 1500 r/min

Emission regulations to be observed:

GB 20891-2014 Stage Ⅲ



Introduction

YCA08 series engine is a high performance is widely used in light bus, light truck, engineering machinery, ship and genera-tor set. After its configuration is upgraded to electronically-control high pressure common rail, the emission meets the requirements for non-road stage III; and it is characterized by sufficient margin, st-ronger dynamic performance, less fuel consumption and better tran-sient loading capability.

Product Features

- Integral crankcase and integral cylinder head are adopted, which ensure good reliability. Wet cylinder liner is adopted, which ensures the wear resistant and easy maintenance.
- High-strength alloy crankshaft is adopted, which ensures good wear resistance, and long service life.
- The internal cooling oil passage technology is adopted for piston, which ensures high temperature resistance and good reliability.
- Advanced and mature electronically-control high pressure common rail fuel system and secondary injection technology are adopted, ensuring better dynamic performance and lower fuel consumption.
- G3 performance requirements for generator set are met.

Product Service

- Service: Yuchai has built the largest service network in the industry with the minimum service radius, the most extensive “three guarantees” and the shortest response time. 49 global offices are set up, including 14 overseas offices in Europe, Africa and South America etc. Besides, 108 overseas service agents, more than 3,000 service stations and 5,000 sales networks of fittings are established, providing the users with satisfying and considerate services.
- 24h global service hotline: +86 95098.

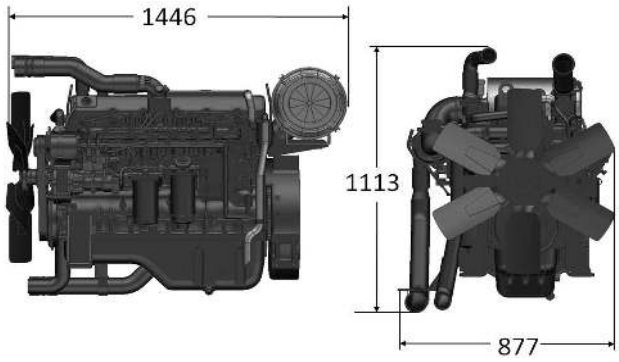
Engine speed	Application	Standard generator unit output		Engine power			
				Total power		Net power	
r/min		kVA	kW	kW	Ps	kW	Ps
1500	Prime	250	200	235	320	225	306
	Standby	275	220	259	352	249	339

✧ Notes:

1. Prime Power: which corresponds to the basic power (PRP) described in ISO 8528. Implement the maintenance according to the Yuchai's requirement, maximum power of variable load continuous output unlimited time. The average output power shall not exceed 70% of the prime power in every 24 hours of operation.
   Standby Power: In correspondence with the emergency standby power (ESP) stated in ISO 8528. Implement the maintenance according to the Yuchai's requirement, maximum power at a variable load in the event of a main power network failure up to a maximum of 200 hours per year. The average output power shall not exceed 70% of the standby power in every 24 hours of operation.
2. The engine power data stated in the table is the measured performance under the condition stated in ISO 8528-1 and ISO 3046.
3. The power output of the generator unit is calculated according to the efficiency of the AC generator. Thus, it is for reference only.
4. The kVA and kW values are converted as per standard power factor 0.8.
5. The information mentioned above is the latest one, however, the relevant information may be altered after publication.

Engine load	1500 r/min	
	g/（kW·h）	L/h
Standby power	204.5	63.43
Prime power	209.9	59.07
75% prime power	225.1	47.51
50% prime power	228.2	32.11

Remarks: the diesel oil density is 0.835 kg/L.



Technical Data

Type … … … … …Vertical, in-line, water-cooled, four-stroke

Aspiration.... … … … …… … … … Turbocharged & Intercooled

Type of combustion chamber ……

……Direct-injection reentrant ω combustion chamber

Number of cylinders - bore × stroke… …6-110×132mm

Number of per cylinder valves … … … … … ... … … … …4

Displacement … … … … … … … … … … … …7.527L

Compression ratio … … … … … … … … … ... … … … ……17.5:1

Cylinder type… … … … … … … ... … … … Wet cylinder liner

Firing order……1-5-3-6-2-4

Fuel supply system … … … … … … …High pressure common rail

Lubrication method... … … … … … … ……Pressure & splash

Starting mode. … … … … … … … … …… … ... … …Electronic

Oil capacity... … … … … … … … … … … … ... … … … … 22L

Oil-fuel ratio… … … … … … … … … ... … … … … …≤0.1%

Rotation……Counterclockwise (viewed from the flywheel end)

Minimum no-load speed… … … … … … ….... （650～700）r/min

Speed control performance level.… … …... … … ISO 8528 G3

Noise Lp … … … … … … … … … ... … … … … …100dB(A)

Total dry weight

Engine… … … … ... … … … …… …… …… …… …750kg

Water tank radiator … … … … … … ... … … … … …100kg

The final weight and size of the engine may vary from specific configuration.

Engine Arrangement

- **Air Intake System**
  - Air filter
  - Turbocharger
- **Cooling system**
  - Radiator (optional)
- **Electrical device**
  - 24 V electric system
  - Inlet preheater (optional)
- **Fuel system**
  - Fuel Filter
  - High pressure common rail
- **Lubrication system**
  - Engine oil filter
- **Flywheel and flywheel housing**
  - SAE 14″ flywheel
  - SAE 1# flywheel housing
- **Documents**
  - Operation Instruction
  - Installation Guide
  - Parts catalog

Fuel grade: Summer: 0# and 10# ordinary diesel oil of GB 252 - 2015 premium grade or first grade; Winter: 0#, -10#, -20# and -35# ordinary diesel oil of GB 252 - 2015 premium grade or first grade.

Oil brand: 15W-40 in summer; 10W-30 or other environmentally suitable diesel engine oils with the quality grade not lower than Grade CH-4 as provided in GB 11122-2006 in winter.