

YC6T660L-D20

Prime power:441 kW @ 1500 r/min Standby power:485 kW @ 1500 r/min

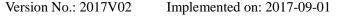
For clients in the places where emission regulations have not been implemented yet

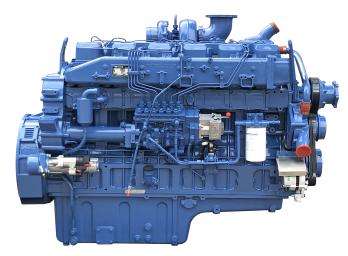
Introduction

The YC6T660L-D20 series engine is a product independently developed by Yuchai by referring to the advanced technology for large engines both at home and abroad. With the configuration of four-valve, turbocharged & intercooled and electronic speed governing and after being optimized and verified by the advanced combustion development technology of Yuchai, the engine is featured in energy conservation, high efficiency, high reliability, strong loading capacity and easy maintenance.

Product Features

- ◆ The technologies of four valves and turbocharged & intercooled are adopted for ensuring sufficient air intake, full combustion and low fuel consumption.
- ◆ Electronic governing technology is adopted for ensuring stable operation, good transient speed governing performance, and strong loading capability.
- The cylinder body is of mesh reinforcement structure, the cylinder cover is of double-layer water flow design, and the crankshaft connecting rod is made from high strength alloy, making the engine highly reliable.
- Gear-reduction starter is adopted, making the engine start quickly.
- ◆ It is characterized by good universality of parts, high serialization degree, structure of one head for one cylinder, and low comprehensive maintenance cost.
- ◆ Support dual energy start.





(Image shown may not reflect actual engine)

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		Engine power			
		output		Total power		Net power	
r/min		kVA	kW	kW	Ps	kW	Ps
1500	Prime	500	400	441	600	424	577
	Standby	550	440	485	660	466	634

♦ 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.



Б : 1 1	1500 r/min			
Engine load	g/ (kW h)	L/h		
Standby power	213.7	124.1		
Prime power	208.4	110.1		
75% prime power	203.4	80.6		
50% prime power	207	54.7		

Remarks: the diesel oil density is 0.835g/cm3.

2488 1240

Technical Data

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Induction system Turbocharged & Intercooled Type of combustion chamber Direct-injection reentrant ω combustion chamber Cylinder quantity - Bore x stroke. 6-145×165mm Number of valve per cylinder. 4 Displacement 16.35L Compression ratio 15:1 Cylinder type Wet-type cylinder sleeve Working sequence 1-5-3-6-2-4 Fuel supply system Mechanical pump + electronic governor Lubrication mode Combination of pressure and splashing Starting mode Electronic Engine oil capacity 52L Engine oil and fuel consumption ratio ≤0.15g/ (kW h) Rotation Anticlockwise (facing the power delivery end) Minimum no-load speed. (700~750) r/min Speed-regulation grade ISO 8528 G3 Speed recovery time ≤3s Noise Lp ≤100.1dB(A) Total dry weight 1980kg	Tuna	Vertical, in-line, water-cooled,			
Type of combustion chamber Cylinder quantity - Bore x stroke. Number of valve per cylinder. Displacement Cylinder type Wet-type cylinder sleeve Working sequence Fuel supply system Combination of pressure and splashing Starting mode Engine oil capacity Engine oil and fuel consumption ratio Rotation Minimum no-load speed. Nine Anticlockwise (facing the power delivery end) Minimum no-load speed. Speed-regulation grade Noise Lp Total dry weight Engine oil engine oil engine oil dry weight Engine oil dry weight Engine oil engi	Туре	four-stroke			
Type of combustion chamber Cylinder quantity - Bore x stroke. Number of valve per cylinder. Displacement Compression ratio Cylinder type Wet-type cylinder sleeve Working sequence Fuel supply system Lubrication mode Starting mode Engine oil capacity Engine oil and fuel consumption ratio Rotation Minimum no-load speed. Speed-regulation grade Number x stroke. 6-145×165mm Wet-type cylinder sleeve Wet-type cylinder sleeve Wet-type cylinder sleeve Mechanical pump + electronic governor Combination of pressure and splashing Electronic 52L Engine oil capacity $\leq 0.15g/(kW h)$ Anticlockwise (facing the power delivery end) Minimum no-load speed. $(700 \sim 750)$ r/min Speed-regulation grade ISO 8528 G3 Speed recovery time $\leq 3s$ Noise Lp Total dry weight Engine 1980kg	Induction system	Turbocharged & Intercooled			
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Compression ratio15:1Cylinder typeWet-type cylinder sleeveWorking sequence $1-5-3-6-2-4$ Fuel supply systemMechanical pump + electronic governorLubrication modeCombination of pressure and splashingStarting modeElectronicEngine oil capacity $52L$ Engine oil and fuel consumption ratio $\leq 0.15 g/ (kW h)$ RotationAnticlockwise (facing the power delivery end)Minimum no-load speed. $(700 \sim 750)$ r/minSpeed-regulation gradeISO 8528 G3Speed recovery time $\leq 3s$ Noise Lp $\leq 100.1 dB(A)$ Total dry weight $= 1980 kg$	Number of valve per cylinder.	4			
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Engine oil capacity Engine oil and fuel consumption ratio Rotation Anticlockwise (facing the power delivery end) Minimum no-load speed. $(700 \sim 750)$ r/min Speed-regulation grade ISO 8528 G3 Speed recovery time $\leq 3s$ Noise Lp Total dry weight Engine 1980kg	Lubrication mode	splashing			
Engine oil and fuel consumption ratio	Starting mode	Electronic			
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Speed-regulation gradeISO 8528 G3Speed recovery time $\leq 3s$ Noise Lp $\leq 100.1 dB(A)$ Total dry weight1980kg	Kotation	power delivery end)			
Speed recovery time $≤3s$ Noise Lp $≤100.1dB(A)$ Total dry weight 1980kg	Minimum no-load speed.	(700~750) r/min			
Noise Lp $\leq 100.1 dB(A)$ Total dry weight $\leq 1980 kg$	Speed-regulation grade	ISO 8528 G3			
Total dry weight Engine 1980kg	Speed recovery time				
Engine 1980kg	Noise <i>Lp</i>	≤100.1dB(A)			
	Total dry weight				
Radiator 269 kg	Engine	1980kg			
	Radiator	269 kg			

The final weight and sizes of the engine varies according to the specific arrangement.

Engine Arrangement

➤ Air Intake System

Air filter

> Cooling system

Radiator assembly (optional)

> Electrical device

24V Starter

Inlet preheater (optional)

> Fuel system

Mechanical pump + electronic governor(The engine meets Grade G3 as specified in ISO 8528-5)

Fuel Filter

> Lubrication system

Engine oil filter

> Flywheel and flywheel housing

SAE 14 flywheel

SAE 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.