

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

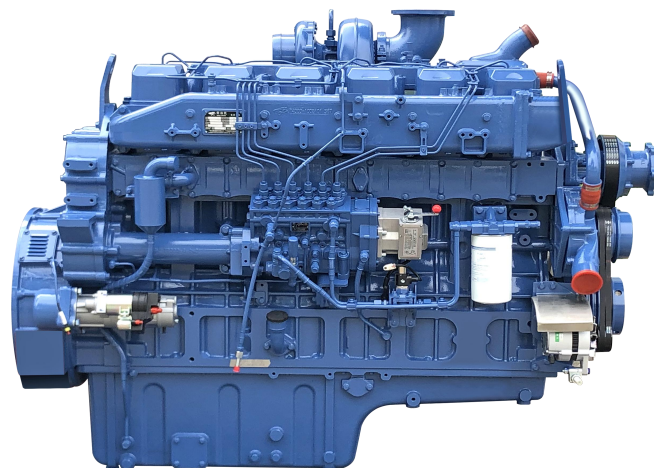
The YC6T660L-D20 series engine is a product independently developed by Yuchai by referring to the advanced technology for large engines both at home and abroad. With the configuration of four-valve, turbocharged & intercooled and electronic speed governing and after being optimized and verified by the 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.

Version No.: 2017V02

Implemented on: 2017-09-01



(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 output		Engine power			
				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

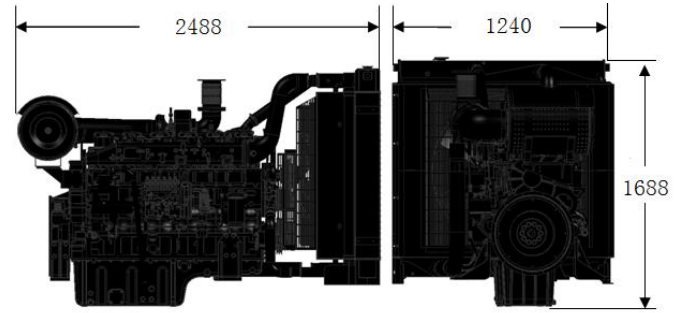
Notes:

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.



Engine load	1500 r/min	
	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.



Technical Data

Type	Vertical, in-line, water-cooled, four-stroke
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 <i>L_p</i>	≤100.1dB(A)
Total dry weight	
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.