

# YC6K570-D32

常用功率 Prime power: 389kW @ 1800 r/min

备用功率 Standby power: 420kW @ 1800 r/min

排放法规遵循 Emission standards:

GB20891-2014 第三阶段 GB20891-2014 Stage III

ECER96 Stage IIIA ECER96 Stage IIIA

## 机型简介 Introduction

YC6K 系列发动机是玉柴高端品质动力产品, 由 AVL 公司设计开发, 集成当今世界最新内燃机技术成果, 拥有技术发明 30 项, 传承玉柴 60 年发动机制造经验。品牌知名度、市场认可度高, 市场保有量大。

YC6K series engine designed by AVL company is the leading product of YC engines, which possesses the latest technologies in the world and more than 30 patents; YC 6K series engine share a good reputation and a considerable market share in the generator unit line.

## 产品特点 Product Features

- ◆ 采用电控高压喷射技术, 瞬态响应速度快, 调速性能优异, 经济性更好。

Electronic-control and high-pressure injection technology realizes a faster transient respond and better speed regulation;

- ◆ 技术领先, 应用世界最先进的高压共轨技术和电控标定技术。

Leading technology: high-pressure common rail technology and electrical calibration technology;

- ◆ 主要结构件采用高强度蠕墨铸铁材料, 发动机重量比传统发动机降低 15%

Core parts apply high-strength vermicular graphite cast iron material with which engine weight decreases 15% compared with traditional engines;

- ◆ 采用玉柴专有活塞环密封技术, 机油燃油比低于 0.2%
- YC specific piston ring sealing technology with which the oil consumption rate decreases 0.2%;

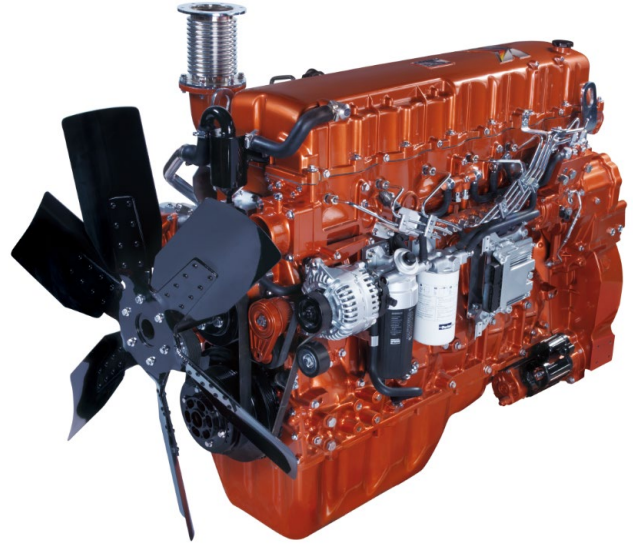
- ◆ 油耗指标达到世界先进水平

Fuel consumption index reaches the world's leading level;

发动机转速 Speed	工作类型 Type	标准发电机组输出 Standard output		发动机功率 Engine Power			
				总功率 Total Power		净功率 Net power	
r/min		kVA	kW	kW	Ps	kW	Ps
1800	常用 Prime	440	350	389	530	369	500
	备用 Standby	450	360	420	570	400	540

## 说明 Notes:

- 1、常用功率 (Prime Power): 对应 ISO 8528 的基本功率 (PRP)。按玉柴维修间隔和方法实施维护保养, 发动机每年运行时间不受限制地为可变负载持续输出的最大功率, 24h 周期内允许平均输出功率应不大于常用功率的 70%。



- ◆ 产品设计制造持续改进, 保证产品可靠性  
Continuous improvement to enhance product reliability

## 产品服务 Product service

- ◆ 服务: 玉柴建立了行业内网络规模最大, 服务半径最小, 三包里程最长, 响应时间最短的服务网络, 设立了 49 个全球办事处, 其中 14 个海外办事处, 覆盖欧洲、非洲、南美洲等。建立了 108 家海外服务代理商, 3000 多个服务站, 5000 多家配件销售网点, 向用户提供满意的捷诚服务。
- ◆ 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 全球服务热线: +86 95098。  
24h global service hotline: +86 95098.



Prime Power: it corresponds to the basic power (PRP) stated 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.

备用功率 (Standby Power): 对应 ISO 8528 的应急备用功率 (ESP)。按玉柴维修间隔和方法实施维护保养, 当公共电网出现故障或在试验条件下, 发动机每年运行达 200h 的某一可变功率系列的最大功率。在 24h 的运行周期内允许的平均输出功率应不大于备用功率的 70%。

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 of every 24 hours' operation shall not exceed 70% of the standby power .

2、上表发动机功率数据均为 ISO 8528-1, ISO 3046 条件下测得。

The engine power data stated above is obtained under the condition stated in ISO 8528-1 and ISO 3046.

3、发电机组电力输出是根据假设的交流发电机效率推算, 仅供参考。

The power output of the generator unit is calculated according to the efficiency of the AC generator. Thus, it is for reference only.

4、kVA 数值和 kW 数值是按 0.8 标准功率因素换算。

The kVA and kW values are converted as per standard power factor 0.8.

5、上述信息付印时为最新信息, 但有关信息可能在出版后修改。

The information mentioned above is the latest one, however, the relevant information may be altered after publication.

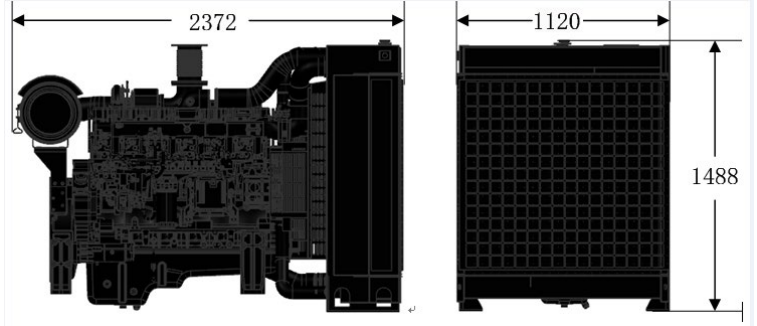
发动机负荷 Engine load	1800 r/min	
	g/ (kW · h)	L/h
备用功率 Prime	205	105
常用功率 Standby power	208	99
75%常用功率 75% Prime	242	86
50%常用功率 50% Prime	262	62

说明：柴油密度按 0.835kg/L。

Remarks: the diesel oil density is 0.835g/cm<sup>3</sup>.

## 技术参数 Technical Data

型式... 立式、直列、水冷、四冲程  
 Type----- Vertical, in-line, water-cooled, four-stroke  
 吸气方式... 废气涡轮增压、中冷  
 Induction system ----- Turbocharged & Intercooled  
 燃烧室型式... 直喷式缩口 ω 燃烧室  
 Type of combustion chamber---- Direct-injection reentrant ω combustion chamber  
 气缸数-缸径×行程... 6-129×165mm  
 Cylinder quantity - Bore x stroke----- 6-129×165mm  
 单缸气门数... 4  
 Number of valve per cylinder-----4  
 活塞总排量... 12.939L  
 Displacement-----12.939L  
 压缩比... 16.5:1  
 Compression ratio-----16.5:1  
 气缸型式... 湿式气缸套  
 Cylinder type----- Wet-type cylinder sleeve  
 工作次序... 1-5-3-6-2-4  
 Working sequence-----1-5-3-6-2-4  
 燃油供给系统... 高压共轨  
 Fuel supply system-----high-pressure common rail  
 润滑方式... 压力、飞溅混合式  
 Lubrication mode----- Combination of pressure and splashing  
 起动方式... 电起动  
 Starting mode----- Electronic  
 机油容量... 28-35L  
 Engine oil capacity-----28-35L  
 机燃比... ≤0.2%  
 Engine oil and fuel consumption ratio-----≤0.2%  
 曲轴旋转方向... 逆时针(面向功率输出端)  
 Rotation----- Anticlockwise (facing the power delivery end)  
 最低空载转速... 650±25/min  
 Minimum no-load speed----- 650~700 r/min  
 调速性能等级... ISO 8528G3  
 Speed-regulation grade----- ISO 8528G3  
 噪声 Lp... ≤98dB(A)  
 Noise Lp-----≤98dB(A)



净重... 约 1300kg

Net weight----- 1300kg

发动机最终重量及尺寸根据具体配置有差异。

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

## 发动机配置

- **进气系统 Air intake system**
    - 空气滤清器 Air filter
  - **冷却系统 Cooling system**
    - 直连风扇 Fan
  - **电器装置 Electrical device**
    - 24V 电器系统 24V electrical system
    - 进气预热器 Intake pre-heater
  - **燃油系统 Fuel system**
    - 电控单体泵系统
    - 燃油滤清器(两级过滤) Fuel filter(two filters)
  - **润滑系统 Lubrication system**
    - 机油滤清器 Oil filter
  - **飞轮和飞轮壳 Flywheel and flywheel house**
    - SAE 14" 飞轮 SAE 14" flying wheel
    - SAE 1# 飞轮壳 SAE 1# flywheel house
  - **文件 Documents**
    - 使用说明书 Operation Instruction
    - 安装指南 Installation guide
    - 零件图册 Parts catalog
- 燃油牌号：夏季：GB 252—2015 优级品或一级品 0 号、10 号普通柴油。冬季：GB 252—2015 优级品或一级品 0 号、-10 号、-20 号、-35 号普通柴油。
- Fuel grade: Summer: premium grade's or first grade's 0# and 10# diesel stated in GB 252-2015. Winter: premium grade's or first grade's 0#, -10#, -20#, and -35# diesel stated in GB 252-2015.



机油牌号：夏季：15W-40，冬季：10W-30 或与环境相适应的，质量等级不低于 GB11122-2006 中 CI-4 级的其它柴油机油。

Oil brand: 15W-40 in summer; in winter, 10W-30 or other oils whose level is not lower than CI-4 stated in GB11122-2006.