



## 基本参数

### Basic parameters

|                        |        |         |
|------------------------|--------|---------|
| 额定容量/功率                | KVA/KW | 225/180 |
| Rated Capacity/Power   |        |         |
| 备用容量/功率                | KVA/KW | 240/192 |
| Standby Capacity/Power |        |         |
| 电压                     | V      | 400     |
| Voltage                |        |         |
| 性能等级                   |        | G2      |
| Performance Level      |        |         |

## 遵循标准

发电机组的设计、制造标准符合 ISO9001:2015，结合各行业多年使用经验，采用安全冗余的设计原则，并符合相关标准：

The design and manufacturing standards of generator sets comply with ISO9001:2015, combined with many years of experience in various industries, adopt the design principle of safety redundancy, and comply with relevant standards.

∞ GB/T 2820-2009 《往复式内燃机驱动的发电机组》

GB/T 2820-2009 Generator sets driven by reciprocating internal combustion engines

∞ YD/T 2888-2015 《通信用 10kV 高压发电机组》

YD/T 2888-2015 10kV high-voltage generator set for communication

∞ GB/T 20136-2006 《内燃机电站通用试验方法》

GB/T 20136-2006 General Test Methods for Combustion Engine Power Stations

∞ GB/T 12786-2006 《自动化柴油机组通用技术条件》

GB/T 12786-2006 General Technical Conditions for Automated Diesel Gensets

## 功率定义

### 基本功率 (Basic power)

符合 ISO 8528 和 ISO 3046 标准的基本功率 (PRP), 按振邦维修间隔和方法实施维护保养, 在不受限制的时间内以可变负载连续运行的最大功率, 在任何 12 小时内均有 1 小时 10% 的过载, 24 小时周期内平均负载率 < 70%。除非往复式内燃机制造商另有规定。

Basic Power Rating (PRP) in accordance with ISO 8528 and ISO 3046, with maintenance performed by ZHENBANG service intervals and methods, maximum power for continuous operation at variable loads for an unrestricted period of time, with a 10% overload for 1 hour in any 12-hour period, and an average load factor of < 70% over a 24-hour cycle. Unless otherwise specified by the reciprocating internal combustion engine manufacturer.

### 备用功率 (Standby Power)

符合 ISO 3046 标准的应急备用功率 (ESP)。按振邦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。该额定值没有过载能力, 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%。除非往复式内燃机制造商另有规定。

Emergency Standby Power (ESP) in accordance with ISO 3046. The maximum power of a certain variable power series for which the engine is operated up to 200h per year when there is a fault in the public power grid or under test conditions when the maintenance is carried out according to the ZHENBANG maintenance intervals and methods. This rating has no overload capacity and the permissible average output power during a 24h operating cycle shall be not more than 70% of the standby power. Unless otherwise specified by the manufacturer of the reciprocating internal combustion engine.

## 机组工作环境

标准机组使用环境要求: 环境温度 -20℃ -- +50℃, 相对湿度 < 98%, 海拔高度 < 2000m。

如使用环境超出以上要求时, 请和工厂联系并咨询。

Standard genset use environment requirements:  
environment temperature -20 °C - +50°C,  
relative humidity < 98%, altitude < 2000m.

If the use of the environment beyond the above requirements  
contact with the factory and consult.

## 机组结构

柴油机、发电机及散热器整体安装在公共的高强度钢底座上, 机组采用一体式结构, 并带电池补偿充电器。

The diesel engine, alternator and radiator are installed as a whole on a common high-strength steel base frame, and the genset adopts a one-piece s with a battery charger.

## 技术参数 (Technical parameters)

### 机组参数 (Unit parameters)

|                                          |                              |                            |                           |
|------------------------------------------|------------------------------|----------------------------|---------------------------|
| 机组型号                                     | ZBYC240GF                    | 110%燃油消耗量                  | 205.1g/KW·h               |
| Genset Model                             |                              | 110% fuel consumption rate |                           |
| 机组额定功率/备用功率                              |                              | 100%燃油消耗量                  | 203.3g/KW·h               |
| Rated power/standby power                | 180/192KW<br>225/240KVA      | 100% fuel consumption rate |                           |
| 额定电压                                     | 400V                         | 75%燃油消耗量                   | 202.3g/KW·h               |
| rated voltage                            |                              | 75% fuel consumption rate  |                           |
| 额定电流                                     | 324A                         | 50%燃油消耗量                   | 204.7g/KW·h               |
| rated current                            |                              | 50% fuel consumption rate  |                           |
| 电制                                       | 三相四线制                        | 机油耗油率                      | ≤0.1%                     |
| Electric                                 | three-phase four-wire system | Oil consumption rate       |                           |
| 额定转速                                     | 1500 rpm                     | 起动方式                       | 直流电起动                     |
| rated speed                              |                              | Starting mode              | Direct current start      |
| 稳态电压偏差                                   | ≤±0.5 %                      | 启动电池电压                     | 24 V                      |
| Steady state voltage deviation           |                              | Starting battery voltage   |                           |
| 电压不平衡度                                   | 1 %                          | 自起动时间                      | 4~30 s                    |
| Voltage unbalance                        |                              | Start time                 |                           |
| 频率降                                      | ≤2 %                         | 功率因数                       | 0.8 (滞后)                  |
| frequency drop                           |                              | Power factor               |                           |
| 稳态频率带                                    | ≤0.5 %                       | 噪声                         | ≤100 dB(A)                |
| Steady-state frequency band              |                              | Noise LP                   |                           |
| 瞬态电压偏差                                   | 突减负载 ≤+20 %<br>突加负载 ≤-15 %   | 电压回复时间                     | 突减负载 ≤4 s<br>突加负载 ≤4 s    |
| Transient voltage deviations             |                              | Voltage recovery time      |                           |
| 瞬态频率偏差                                   | 突减负载 ≤+10 %<br>突加负载 ≤-7 %    | 频率恢复时间                     | 突减负载 ≤3 s<br>突加负载 ≤3 s    |
| Transient frequency deviations           |                              | Frequency recovery time    |                           |
| 进风量                                      | 206m³/min                    | 排风量                        | 457m³/min                 |
| Air intake                               |                              | Air outlet                 |                           |
| 排气温度限值 (涡后)                              | 550℃                         | 散热器                        | 铜片式散热器                    |
| Exhaust temperature limit (after vortex) |                              | radiator                   | 50℃ Copper plate radiator |
| 总机油容量                                    | 30L                          | 防冻液总容量                     | 34L                       |
| Total oil capacity                       |                              | Coolant capacity           |                           |

## 发动机 (Engine)

|                                         |                                 |
|-----------------------------------------|---------------------------------|
| 发动机型号                                   | YC6MK285L-D20                   |
| model                                   | YC6MK285L-D20                   |
| 原产地及品牌                                  | 广西 玉柴                           |
| Origin and brand                        | GUANGXI YUCHAI                  |
| 额定功率/备用功率                               | 192/211.2                       |
| Rated power/standby power               | 192/211.2                       |
| 冷却方式                                    | 闭式水冷                            |
| Cooling type                            | Closed water cooling            |
| 进气型式                                    | 增压中冷                            |
| Air intake                              | Turbocharged & intercooled      |
| 汽缸数量及排列方式                               | 6缸 直列                           |
| Cylinders number and arrangement        | 6-cylinder in-line              |
| 缸径/行程                                   | 123mm/145mm                     |
| Bore/stroke                             | 123mm/145mm                     |
| 总排量                                     | 10.34L                          |
| Displacement                            | 10.34L                          |
| 压缩比                                     | 16.8:1                          |
| Compression ratio                       | 16.8:1                          |
| 燃油系统                                    | 直喷                              |
| Fuel system                             | Direct injection                |
| 涡轮后排气温度-常用满载                            | ≤550 °C                         |
| Exhaust temperature after turbocharging | ≤550 °C                         |
| 润滑方式                                    | 压力和飞溅润滑                         |
| Lubrication method                      | Pressure and splash lubrication |
| 油底壳容量                                   | 30L                             |
| Oil pan capacity                        | 30L                             |
| 调速方式                                    | 电子调速                            |
| Speed regulation method                 | Electronic Governor             |
| 排烟口规格                                   | DN250                           |
| Exhaust specifications                  | DN250                           |
| 排气背压限值                                  | 10kPa                           |
| Exhaust back pressure limit             | 10kPa                           |
| 标准电压                                    | 24V                             |
| Standard voltage                        | 24V                             |

## 发电机 (Alternator)

|                               |                         |
|-------------------------------|-------------------------|
| 发电机型号                         | AMEE-IE2-G              |
| model                         | AMEE-IE2-G              |
| 原产地及品牌                        | 上海 拉法特                  |
| Origin and brand              | SHANGHAI LAFERT         |
| 额定功率                          | 180kW                   |
| Rated power                   | 180kW                   |
| 电压调节                          | 自动电压调节                  |
| Voltage regulation            | Automatic regulation    |
| 额定电压                          | 400V                    |
| Rated voltage                 | 400V                    |
| 额定频率                          | 50 Hz                   |
| Rated frequency               | 50 Hz                   |
| 承受过载能力                        | 110% 1h                 |
| Overload capacity             | 110% 1h                 |
| 承受过流能力                        | 120% 2min               |
| Overcurrent capacity          | 120% 2min               |
| 绕组温升                          | F 级                     |
| Winding temperature rise      | F 级                     |
| 绝缘等级                          | H 级                     |
| Insulation class              | H 级                     |
| 持续短路时间                        | 3ln 2s                  |
| Continuous short circuit time | 3ln 2s                  |
| 满载效率 (PF=0.8)                 | 95.6%                   |
| Full load efficiency (PF=0.8) | 95.6%                   |
| 励磁方式                          | 无刷自励                    |
| Excitation mode               | Brushless self-exciting |
| 防护等级                          | IP23                    |
| protection class              | IP23                    |
| 超速能力                          | 1800 r/min              |
| Overspeed ability             | 1800 r/min              |
| 轴承数量                          | 1                       |
| bearing Number                | 1                       |
| 定子绕组节距                        | 2/3 pitch               |
| Stator Winding                | 2/3 pitch               |

## 控制系统基本功能 (Basic functions of the control system) ZIMBON7800

全面的发电机组控制器，适用于在待机或并联模式下运行的单发电机组和多发电机组

Comprehensive genset controller for single and multiple gensets operating in standby or parallel mode

∞ 可与便于拆卸的彩色显示器 IntelliVision5 或 IntelliVision 8 配合使用

Can be used with IntelliVision5 or IntelliVision 8, color monitors that are easy to remove

∞ 支持带ECU 单元的发动机 (ECU-电子控制单元)

Support engines with ECU units (ECU-electronic control unit)

∞ 通过 CAN 总线完成集成的发电机组解决方案和信号共享 - 所需的外部组件最少

Integrated genset solution and signal sharing via CAN bus - minimal external components required

∞ 单台或多台发电机组与主电源 (市电) 进行并联，具有自动备份功能，支持多岛操作多种通信型式，轻松的远程监控和服务。

Single or multiple generator sets are carried out with the main power supply (mains). Parallel, with automatic backup function, support multi-island operation.

- 多种通信型式 - 轻松的远程监控和服务
- Support multiple communication types-easy remote monitoring and service
- 通过 CAN 通讯实现有功和无功功率分配
- Active and reactive power distribution through CAN communication
- 通过 CAN 通讯提供虚拟共享输入和输出支持广泛的应用
- Provides virtual shared inputs and outputs via CAN communication to support a wide range of applications



**ZIMBON**

**智能终端**

- ☆ 可联网的全功能机组智能终端
- ☆ 32位ARM双核处理器
- ☆ 支持中文/英文菜单显示
- ☆ 大尺寸彩色液晶显示屏
- ☆ ABS阻燃外壳
- ☆ H9强度亚克力防护
- ☆ 轻触感硅胶按键
- ☆ 防护等级: IP56

振邦动力服务系统——智能终端

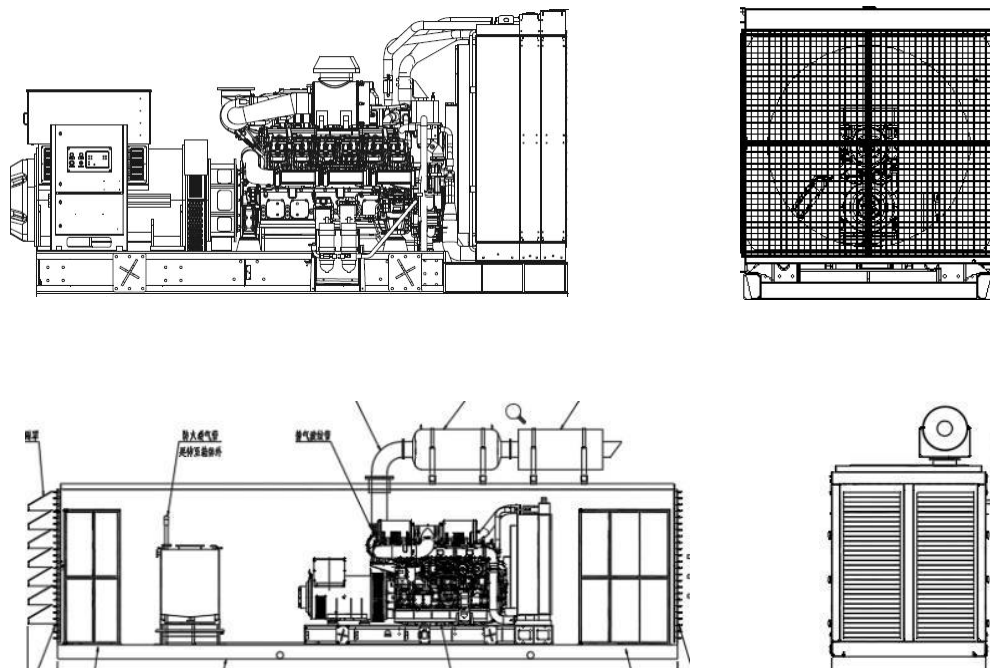


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## 机组标准出厂配置 (Standard factory configuration of the unit)

|                                               |                                                                      |                                           |
|-----------------------------------------------|----------------------------------------------------------------------|-------------------------------------------|
| ∞ 水冷柴油机<br>Diesel engine                      | ∞ 水箱散热器<br>Radiator                                                  | ∞ 交流发电机<br>Alternator                     |
| ∞ 控制器<br>Controller                           | ∞ 电子调速器<br>Electronic governor                                       | ∞ 底座及减震器<br>Base frame and shock absorber |
| ∞ 工业型消音器<br>Muffler                           | ∞ 金属波纹管<br>Bellows                                                   | ∞ 塑料薄膜包装<br>Plastic film packaging        |
| ∞ 油水分离过滤器<br>Fuel water separator filter      | ∞ ZIMBON7800 控制器<br>ZIMBON7800 control panel                         | ∞ 油箱<br>Fuel tank                         |
| ∞ 用户手册、技术资料<br>user manual、technological data | ∞ 标准空气滤芯、柴油滤芯、机油滤芯<br>Standard air filter, diesel filter, oil filter |                                           |

## 机组外形尺寸及重量 (Dimensions and weight)



| 机组类型<br>Genset type  | 长×宽×高 (mm)<br>L×W×H (mm) | 静载荷 (kg)<br>Static load | 动载荷 (kg)<br>Dynamic load |
|----------------------|--------------------------|-------------------------|--------------------------|
| 开式机组<br>open type    | 3025×1260×1720           | 1915                    | 3830                     |
| 静音箱机组<br>Silent type | 3300×1400×1840           | 2615                    | 5230                     |