

400kW 潍柴柴油发电机组 Weichai diesel generator set

50Hz 发动机型号 Engine model	WP13D490E310
发电机品牌及型号 alternator brand model	GZSTF POWER, STF400-1-4
发电机品牌及型号 alternator brand model	Leroysoner, TAL-A47-C
发电机品牌及型号 alternator brand model	Stanford, S5L1D-C4
50Hz 常用功率 Prime power	400KW/500KVA
50Hz 备用功率 Standby power	440KW/550KVA

标准配置

总体描述:

- 发动机 Engine model (WP13D490E310)
- 满足环境温度, 水箱散热器, 皮带驱动冷却风扇, 带风扇安全护罩 Meet the environmental temperature, water tank radiator, belt driven cooling fan, With fan safety shield
- 24VDC 充发电机 charger
- 发电机: 单轴承发电机, 防护 IP21, H 级绝缘
- **Alternator: Single Bearing, IP21, H-insulation**
- 干式空气过滤器、燃油过滤器、机油过滤器
- air filter, fuel filter, oil filter
- 日用油箱、减震器
- 8-hour fuel tank, shock absorber
- 2×12VDC 启动电瓶及电瓶连接电缆 Start the battery and battery connection cable
- 排烟弯管、波纹管、法兰、消音器一套 A set of smoke exhaust elbows, corrugated pipes, flanges, and silencers
- 随机使用资料 Random use of materials

发电机参数 Generator parameters

电压 Voltage	频率 Frequency (Hz)	相数 Phase sequence	功率因数 Power factor	额定电流 Rated current (A)	常用功率 Prime power (kW/kVA)
230/400	50	3	0.8	721.7	400/500

发动机功率与海拔高度关系: 海拔高度 1500 米以上, 每升高 300 米, 功率下降 4%。

发动机功率与环境温度关系: 环境温度高于 40 摄氏度每超过 10 摄氏度, 发动机功率降低 3%。

The relationship between engine power and altitude: When the altitude is above 1500 meters, the power decreases by 4% for every 300 meters increase.

The relationship between engine power and ambient temperature: For every 10 degrees Celsius above 40 degrees Celsius, the engine power decreases by 3%.

销售承诺 Sales Commitment

提供的产品均为全新的产品，每一台机组均经过严格的出厂检测。

产品均提供保修服务，保修期为机组调试验收合格后的12个月或累计运行1000小时，以先到期为准。

The products provided are all brand new, and each unit has undergone strict factory testing.

All products provide warranty services, with a warranty period of 12 months after the unit is debugged and accepted, or a total of 1000 hours of operation, whichever expires first.

1500rpm 发动机性能数据 engine performance data		
输出功率 output power		
%	kW	HP
基本输出功率 Basic output power		
100	450	603
75	337.5	452
50	225	302
25	112.5	151

发动机参数 Engine parameters	
引擎基本参数 Basic engine parameters	
生产商/型号 Model	WP13D490E310
进气方式 Aspiration	增压中冷 Turbocharged and intercooled
燃油系统 Fuel System	电控高压共轨 Electronically controlled high pressure common rail
汽缸型式 Cylinder type	L 型 6 缸，四冲程 L-type 6-cylinder, four strokes
排量 Displacement L	19.6 L
缸径×行程 mm Bore × Stroke mm	150×185 (mm)
压缩比 Compression Ratio	15:1
发动机转速 Engine Speed rpm	1500
发动机备用功率 Standby power kW	490
发动机常用功率 Prime power kW	450

发电机参数 alternator parameter	
发电机技术参数 alternator parameter	
生产商/型号 Mode	GZSTF POWER STF400-1-4
相数 Phase	3
接线方式 Connection	三相四线，Y型绕接 Three phase four wire, Y-type winding
轴承数 bearing number	1
功率因数 Power factor	0.8

防护等级protection grade	IP21
海拔要求Altitude requirements	≤1000m
励磁方式Excitation method	无刷自励 Brushless self excitation
绝缘等级/温升等级Insulation level	H/H
电话影响系数TIF	<50
电话谐波系数THF	<2%
最大超速Maximum overspeed	2250转RPM/分MID
发电机容量Capacity	400KW
发电机效率Efficiency	≥95 %
50Hz电压voltage	230/400V

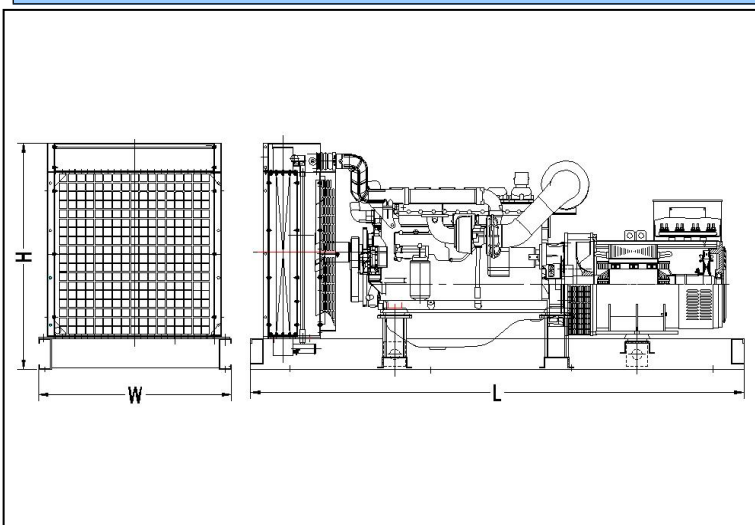
机组参数 Generator set parameters	
电压整定范围voltage setting range	≥±10%
稳态电压调整率Steady state voltage regulation rate	≤0.5%
瞬态电压偏差（100%突减功率）Transient voltage deviation	≤+17%
瞬态电压偏差（40%突加功率）Transient voltage deviation	≤-6.5%
电压稳定时间（100%突减功率）Voltage stability time	≤2.8S
电压稳定时间（40%突加功率）Voltage stability time	≤2.5S
频率调整范围frequency adjustment	≥±5%可调
频率波动率Frequency fluctuation rate	≤±0.25%
瞬态频率偏差（100%突减功率）Transient frequency deviation	≤+8%
瞬态频率偏差（40%突加功率）Transient frequency deviation	≤-5%
频率恢复时间（100%突减功率）Frequency recovery time	≤1.48S
频率恢复时间（40%突加功率）Frequency recovery time	≤1.35S

发电机组质量标准 Quality standards for generator sets
柴油发电机组严格按标准进行设计、生产和测试、可满足各种环境下使用，符合以下相关标准： The diesel generator set is designed, produced and tested in strict accordance with the standards, which can meet the requirements of various environments and meet the following relevant standards:
GB/T 2820.1~6-2009、GB/T 2820.8~10-2002、GB/T 2820.12-2002、JB/T 10303-2001 JB/T 2819-1995、JB8587-1997、ISO8528、ISO3046、ISO9001, ISO14001, CE

资料 Information	
发动机零件图册及原厂资料 Engine parts catalog and original factory information	发电机组保养记录手册 Generator Set Maintenance Record Manual
发电机原厂资料 Original factory information of the generator	发电机组安装操作手册 Generator Set Installation and Operation Manual
控制系统原厂资料 Original factory information of control system	发电机组安装调试验收单 Receipt of Generator Set Installation and Adjustment Test
发电机组原厂测试报告 Genset Factory Test Report	发电机组原厂产地证明书 Certificate of Origin of Generator Set

选购件 Optional parts		
发动机engine	发电机alternator	电气系统Electrical system
● 中冷水加热器	● 防冷凝加热器	● 与机组分离远程控制系统
● 机油预热器	● 永磁励磁系统 (PMG)	● 带三遥功能的机组控制屏
● 空气启动马达	● 电压下垂 (并联用)	● ATS自动负荷转换屏
● 沙漠用重型空气滤清器	● 其它温升等级的发电机	● 多台机组全自动并联屏
● 重型二级消声器	● RTD温度传感器, 每相2个	● 防冷凝加热器
● Intermediate cold water heater	● Anti condensation heater	● Remote control system separated from the unit
● Oil preheater	● Permanent magnet excitation system (PMG)	● Unit control screen with three remote functions
● Air starting motor	● Voltage droop (for parallel connection)	● ATS automatic load transfer screen
● Desert heavy-duty air filter	● Generators of other temperature rise grades	● Fully automatic parallel screen for multiple units
● Heavy duty secondary muffler	● RTD temperature sensors, 2 per phase	● Anti condensation heater
燃油系统fuel system	其他other	冷却系统Cooling system
● 底座油箱	● 防雨型机组	● 热交换器和外循环冷却塔
● 油水分离器	● 静音型机组	● 远置水箱
● 全自动供油系统	● 拖车型机组	● 分体式水箱
● 埋地燃油罐	● 车载型发电车	● 船用冷却系统
● Base oil tank	● Rain proof unit	● Heat exchanger and external circulation cooling tower
● Oil water separator	● Silent type unit	● Remote water tank
● Fully automatic oil supply system	● Trailer type unit	● Split water tank
● Buried fuel tanks	● Vehicle mounted power generation vehicle	● Marine cooling system

尺寸与重量



标准型 : L×W×H

外形尺寸: (mm)

重量: kg

静音式: L×W×H

外形尺寸: 4600*1800*2550(mm)

重量: kg