

## Diesel Generating Set

### **BF-P2500**

| MODEL                | BF-P2500        |
|----------------------|-----------------|
| Standby Power (50Hz) | 2000KW /2500KVA |
| Prime Power (50Hz)   | 1818KW /2272KVA |

### **Standard Features**

General Features: Engine (Perkins 4016-61TRG3 ) Radiator 50<sup>o</sup>C max, fans are driven by belt, with safety guard 24V charge alternator Alternator: single bearing alternator IP23,insulation class H/H Absorber Dry type air filter, fuel filter, oil filter, coolant filter Main line circuit breaker Standard control panel batteries, rack and cable Ripple flex exhaust pipe, exhaust siphone, flange, muffler User manual



## PHOTO FOR REFERENCE ONLY

## **Generator Ratings**

| Voltage | HZ | Phase | P.F<br>(COS¢) | Standby<br>Amps | Standby<br>Ratings<br>(KW/KVA) | Prime<br>Ratings<br>(KW/KVA) |
|---------|----|-------|---------------|-----------------|--------------------------------|------------------------------|
| 440/254 | 50 | 3     | 0.8           | 3280            | 2000/2500                      | 1818/2272                    |
| 415/240 | 50 | 3     | 0.8           | 3478            | 2000/2500                      | 1818/2272                    |
| 400/230 | 50 | 3     | 0.8           | 3608            | 2000/2500                      | 1818/2272                    |
| 380/220 | 50 | 3     | 0.8           | 3798            | 2000/2500                      | 1818/2272                    |

Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqvISO8528); A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

#### **Sales Promises**

Baifa Power provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: 12 months or 1,000 running hours, subject to the earlier one.

Service and parts are available from Baifa Power or distributors in your location.



BF-P2500

| Manufacturer / Model:            | Perkins 4016-61TRG3, 4-cycle |  |  |  |  |
|----------------------------------|------------------------------|--|--|--|--|
| Air Intake System:               | Turbo, Water/Air cooling     |  |  |  |  |
| Fuel Injection System:           | Direct Injection             |  |  |  |  |
| Cylinder Arrangement:            | 16 in "V"                    |  |  |  |  |
| Displacement:                    | 61.123 L                     |  |  |  |  |
| Bore and Stroke:                 | 160×190 (mm)                 |  |  |  |  |
| Compression Ratio:               | 13.0                         |  |  |  |  |
| Rated RPM:                       | 1500rpm                      |  |  |  |  |
| Max. Standby Power at Rated RPM: | 2183KW/2970HP                |  |  |  |  |
| Governor Type:                   | Electronic                   |  |  |  |  |
| Exhaust System                   |                              |  |  |  |  |
| Exhaust Gas Flow(after turbo):   | 490m <sup>3</sup> /min       |  |  |  |  |
| Exhaust Temperature:             | <b>560</b> ℃                 |  |  |  |  |
| Max Back Pressure:               | 4kPa                         |  |  |  |  |
| Air Intake System                |                              |  |  |  |  |
| Max Intake Restriction:          | 3.71kPa                      |  |  |  |  |
| Consumption:                     | 175m <sup>3</sup> /min       |  |  |  |  |
| Air Flow:                        | 2500m <sup>3</sup> /min      |  |  |  |  |
| Fuel System                      |                              |  |  |  |  |
| 100%( Prime Power) Load:         | 205 g/Kw.h                   |  |  |  |  |
| 75%(Prime Power) Load:           | 200 g/Kw.h                   |  |  |  |  |
| 50%(Prime Power) Load:           | 204 g/Kw.h                   |  |  |  |  |
| 100%( Prime Power) Load:         | 454.4 L/h                    |  |  |  |  |
| Oil System                       |                              |  |  |  |  |
| Oil Consumption:                 | 0.52g/KWhr                   |  |  |  |  |
| Engine Oil Tank Capacity:        | 213L                         |  |  |  |  |
| Min Oil Pressure at Rated RPM:   | 340kPa                       |  |  |  |  |
| Cooling System                   |                              |  |  |  |  |
| Total Coolant Capacity:          | 350L                         |  |  |  |  |
| Thermostat:                      | <b>71-85</b> ℃               |  |  |  |  |
| Max Water Temperature:           | <b>98</b> °C                 |  |  |  |  |
|                                  |                              |  |  |  |  |



## GENERAL DATA

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.

| Alternator Data                     |  |  |  |  |  |  |
|-------------------------------------|--|--|--|--|--|--|
| Number of Phase:                    | 3  |  |  |  |  |  |
| Connecting Type:                    | 3 Phase and 4 Wires, "Y" type connecting |  |  |  |  |  |
| Number of Bearing:                  | 1  |  |  |  |  |  |
| Power Factor:                       | 0.8                                      |  |  |  |  |  |
| Protection Grade:                   | IP23                                     |  |  |  |  |  |
| Altitude:                           | ≤1000m                                   |  |  |  |  |  |
| Exciter Type:                       | Brushless, self-exciting                 |  |  |  |  |  |
| Insulation Class, Temperature Rise: | H/H                                      |  |  |  |  |  |
| Telephone Influence Factor (TIF):   | <50                                      |  |  |  |  |  |
| THF:                                | <2%                                      |  |  |  |  |  |
| Voltage Regulation, Steady State:   | ≤±1%                                     |  |  |  |  |  |
| Alternator Capacity:                | 2275KVA                                  |  |  |  |  |  |
| Alternator Efficiencies:            | 96.5%                                    |  |  |  |  |  |
| Air Cooling Flow:                   | 2.5m <sup>3</sup> /s                     |  |  |  |  |  |
|                                     |  |  |  |  |  |  |

# **GENERATING SET DATA**

| Voltage Regulation:                           | ≥±5%  |
|---|-------|
| Voltage Regulation, Stead State:              | ≤±1%  |
| Sudden Voltage Warp (100% Sudden Reduce):     | ≤+25% |
| Sudden Voltage Warp (Sudden Increase):        | ≤-20% |
| Voltage Stable Time (100% Sudden Reduce):     | ≤6S   |
| Voltage Stable Time (Sudden Increase)         | ≤6S   |
| Frequency Regulation, Stead State:            | ≤5%   |
| Frequency Waving:                             | ≤1%   |
| Sudden Frequency Warp (100% Sudden Reduce):   | ≤+12% |
| Sudden Frequency Warp (Sudden Increase):      | ≤-10% |
| Frequency Recovery Time (100% Sudden Reduce): | ≤5S   |
| Frequency Recovery Time (Sudden Increase):    | ≤5S   |





- "COMAP" Standard Auto
  Control System
- Starting
  batteries( Maintenance-Free & Watering-Free) with
   connective wires
- ◇ Permanent Magnet Generator(PMG)

♦ Oil Drain Valve

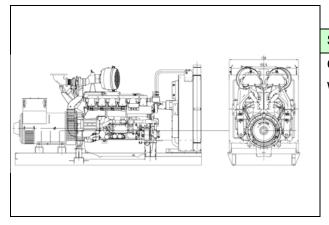
Exhaust System( including until muffler)
 Documents

## Options

- ◇ Daily Fuel Tank
- $\diamond$  Battery Charger
- $\diamond$  Engine Heater
- $\diamond$  Water Separator
- $\diamond$  Alternator Heater
- ◇ Rainproof Type
- ♦ Soundproof Type
- ♦ Spare Parts

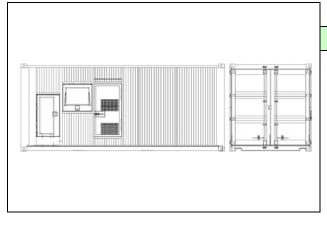
- ♦ Remote Control Panel
- $\diamond$  Paralleling System
- $\diamondsuit$  Automatic Transfer Switch
- $\diamondsuit$  Switch box

# Dimension & Weight



## Standard Configuration (Open Type)

Overall Size: 6000(mm)×2700(mm)×3400(mm) Weight: 14000kg



### Soundproof Type (40'ft high container)

Overall Size: 12192(mm)×2438(mm)×2896(mm) Weight:20300kg





Auto Module Control Panel is the configuration for nobody on duty controlling generators. This kind of panel adopts auto module control system, with large LCD display to show the menu.

Features: MRS10-can receive remote output signal from ATS and realize auto start and stop of generators.

MRS16-can realize all functions of MRS10, add RS232 interface which can communicate with PC to realize remote operation.

AMF25-Auto Mains Failure controller, can realize all functions of MRS16, furthermore can detect ATS and control directly.

## Auto Parallel Control Panel



Automatic Parallel Control Panel This new automatic parallel system adopts intelligent modules, inserted and folded installed, no need the peripheral relay and logic circuit. The main switch adopts electronic breaker or frame breaker, combined together with the generator, which is very reliable. One generator, one panel. The panel can be used both for singly and parallel. It is only need to parallel generator with such panel when the capability needs to be enlarged in the future.