

## **Diesel Generating Set**

### **BF-P165**

| MODEL                | BF-P165        |
|----------------------|----------------|
| Standby Power (50Hz) | 132KW / 165KVA |
| Prime Power (50Hz)   | 120KW / 150KVA |

### **Standard Features**

#### General Features:

- Engine (Perkins 1106A-70TAG2)
- Radiator 50<sup>o</sup>C max, fans are driven by belt, with safety guard
- 12V 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 siphon, 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           | 216.5           | 132/165                        | 120/150                      |
| 415/240 | 50 | 3     | 0.8           | 229.6           | 132/165                        | 120/150                      |
| 400/230 | 50 | 3     | 0.8           | 238.2           | 132/165                        | 120/150                      |
| 380/220 | 50 | 3     | 0.8           | 250.7           | 132/165                        | 120/150                      |

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-P165**

| Manufacturer / Model:            | Perkins 1106A-70TAG2, 4-cycle      |  |
|----------------------------------|------------------------------------|--|
| Air Intake System:               | Turbocharged and air charge cooled |  |
| Fuel Injection System:           | Direct Injection                   |  |
| Cylinder Arrangement:            | 6 in line                          |  |
| Displacement:                    | 7.01L                              |  |
| Bore and Stroke:                 | 105×135 (mm)                       |  |
| Compression Ratio:               | 16:1                               |  |
| Rated RPM:                       | 1500rpm                            |  |
| Max. Standby Power at Rated RPM: | 144.1KW/196HP                      |  |
| Governor Type:                   | Mechanical                         |  |

| Exhaust System                 |                          |  |
|--------------------------------|--------------------------|--|
| Exhaust Gas Flow(after turbo): | 23.78m <sup>3</sup> /min |  |
| Exhaust Temperature:           | <b>484</b> °C            |  |
| Max Back Pressure:             | 6kPa                     |  |
| Air Intake System              |                          |  |
| Max Intake Restriction:        | 3kPa                     |  |
| Consumption:                   | 10.2m <sup>3</sup> /min  |  |
| Air Flow:                      | 282m <sup>3</sup> /min   |  |
| Fuel System                    |                          |  |
| 100%( Prime Power) Load:       | 203.3 g/Kwh              |  |
| 75%(Prime Power) Load:         | 199.7 g/Kwh              |  |
| 50%(Prime Power) Load:         | 197.9 g/Kwh              |  |
| 100%( Prime Power) Load:       | 33.4L/h                  |  |
| Oil System                     |                          |  |
| Total System Oil Capacity :    | 16.5L                    |  |
| Engine Oil Tank Capacity:      | 14.9L                    |  |
| Min Oil Pressure at Rated RPM: | 340-430kPa               |  |
| Cooling System                 |                          |  |
| Total Coolant Capacity:        | 21L                      |  |
| Thermostat:                    | 82-93°C                  |  |
| Max top tank Temperature:      | 118°C                    |  |



**BF-P165** 

# ALTERNATOR SPECIFICATION

#### **GENERAL DATA**

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

| Alternator Data                     |  |  |  |
|-------------------------------------|--|--|--|
| Manufactory:                        | Stamford or MECC ALTE                    |  |  |
| 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%                                      |  |  |
| Alternator Capacity:                | 160KVA                                   |  |  |
| Alternator Efficiencies:            | 92.3%                                    |  |  |
|                                     |  |  |  |

# **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   |





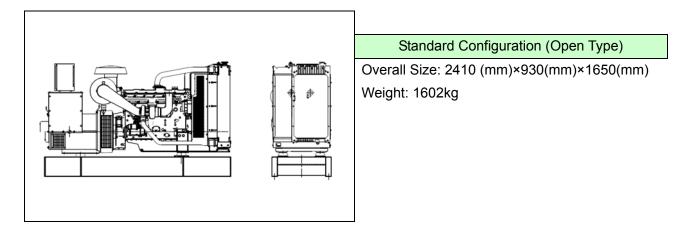
♦ Spare Parts

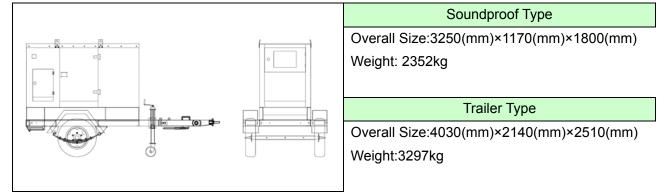
| ◇ Baifa Standard Auto Control<br>System | ♦ MCCB   | <ul> <li>◇ Starting batteries</li> <li>( Maintenance-Free &amp;</li> <li>Watering-Free) with connective</li> <li>wires</li> </ul> |
|---|--|---|
| $\diamond$ Oil Drain Valve              | <ul> <li>Exhaust System( including<br/>until muffler)</li> </ul> | $\diamond$ Base Fuel Tank   |
| $\diamond$ Documents                    | ,  |   |
| Options                                 |  |   |
| $\diamond$ Daily Fuel Tank              | <ul> <li>Permanent Magnet</li> <li>Generator(PMG)</li> </ul>     | ◇ Remote Control Panel  |
| $\diamond$ Battery Charger              | $\diamond$ Rainproof Type  | $\diamond$ Automatic Transfer Switch  |
| $\diamond$ Engine Heater                | $\diamond$ Soundproof Type                                       | $\diamond$ Switch box   |

◇ Trailer Type

Alternator Heater
 Water Separator

## **Dimension & Weight**









**Baifa Standard Control Panel** uses micro processing technique integrating digital, intelligent and network techniques which can carry out functions including auto start/stop, data measure, alarming. The controller uses LCD display, optional Chinese and English display interface with operation easy and reliable. It can be widely used in all types of generator automatic control system for compact structure, advanced circuits, simple connections and high reliability

## **Auto Module Control Panel**



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.