

# **Diesel Generating Set**

## **BF-SM1650**

MODEL	BF-SM1650
Standby Power (50Hz)	1320KW / 1650KVA
Prime Power (50Hz)	1200KW / 1500KVA

## **Standard Features**

General Features:	
Engine (Mitsubishi S12R-PTAA2-C)	
Radiator 40°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, pre-filter, coolant filter	
Main line circuit breaker	
Standard control panel	
Two12V 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 (COS¢)	Standby Amps	Standby Ratings (KW/KVA)	Prime Ratings (KW/KVA)
254/440	50	3	0.8	2165	1320/1650	1200/1500
240/415	50	3	0.8	2295	1320/1650	1200/1500
230/400	50	3	0.8	2381	1320/1650	1200/1500
220/380	50	3	0.8	2506	1320/1650	1200/1500

Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqv ISO8528); 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: a, 15 months, counted on the day BAIFA sold to the first buyer; b, One year after installation; c, 1000 running hours (accumulated); subject to the earlier one.

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





Manufacturer / Model:	Mitsubishi S12R-PTAA2-C, 4-cycle
Air Intake System:	Turbo, Air/Air Cooling
Fuel System:	Mitsubishi PS6
Cylinder Arrangement:	12 in "V"
Displacement:	49.03L
Bore and Stroke:	170×180 (mm)
Compression Ratio:	13.5
Rated RPM:	1500rpm
Max. Standby Power at Rated RPM:	1404KW/1882HP
Governor Type:	Electronic
Exhaust Syste	em
Exhaust Gas Flow:	343m <sup>3</sup> /min
Exhaust Temperature:	520°C
Max Back Pressure:	5.8kPa
Air Intake Syst	tem
Max Intake Restriction:	6.1kPa
Burning Capacity:	126m <sup>3</sup> /min
Air Flow:	1800m <sup>3</sup> /min
Fuel System	1
100%(Prime Power) Load:	221g/Kw.h
75%(Prime Power) Load:	N/A
50%(Prime Power) Load:	N/A
100%(Prime Power) Load:	331L/h
Oil System	
Total Oil Capacity:	180L
Oil Consumption:	≤4g/kwh
Engine Oil Tank Capacity:	110~150L
Oil Pressure at Rated RPM:	490-640kPa
Cooling Syste	em
Total Coolant Capacity:	391L
Thermostat:	71-85℃
Max Water Temperature:	98°C



ALTERNATOR SPECIFICATION

## GENERAL DATA

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

Alternat	or 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%
Alternator Capacity:	1550KVA
Alternator Efficiencies:	95.4%

# **GENERATING SET DATA**

≥±5%	Voltage Regulation:
≤±1%	Voltage Regulation, Stead State:
≤+20%	Sudden Voltage Warp (100% Sudden Reduce):
<b>≤-15%</b>	Sudden Voltage Warp (Sudden Increase):
≤4S	Voltage Stable Time (100% Sudden Reduce):
≤4S	Voltage Stable Time (Sudden Increase)
≤5% Adjustable	Frequency Regulation, Stead State:
≤0.5%	Frequency Waving:
≤+10%	Sudden Frequency Warp (100% Sudden Reduce):
≤ <b>-</b> 7%	Sudden Frequency Warp (Sudden Increase):
≤3S	Frequency Recovery Time (100% Sudden Reduce):
≤3S	Frequency Recovery Time (Sudden Increase):



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# **Standard Features**

- ◇ "BAIFA" Standard Auto Control System
  ◇ Starting
  batteries( Maintenance-Free & Watering-Free) with connective
- ◇Permanent MagnetGenerator(PMG)
- Exhaust System( including until muffler)
- ♦ Oil Drain Pump
- $\diamond$  Documents

#### **Options**

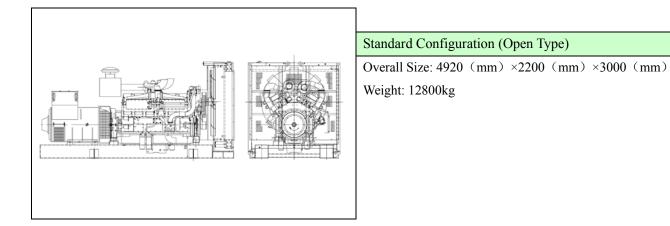
wires

- ♦ Daily Fuel Tank
- ♦ Battery Charger
- $\diamond$  Engine Heater
- $\diamond$  Water Separator

- $\diamond$  Alternator Heater
- $\diamond$  Soundproof Type
- $\diamond$  Trailer Type
- $\diamond$  Spare Parts

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

# **Dimension & Weight**





# **Standard Control Panel**

**Auto Module Control Panel** 



**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** 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.