

MODEL	HQWY20GF	
Prime Power(50Hz)	20KW	25KVA
Standby Power(50Hz)	22KW	27.5KVA

**Standard Features**

General Features:

- ◆ Engine ( Weichai Yangchai Series WP2.5D22E2 )
- ◆ Radiator 40°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
- ◆ Main line circuit breaker
- ◆ Standard control panel
- ◆ Batteries, rack and cable
- ◆ Ripple flex exhaust pipe, exhaust siphon, flange, muffler
- ◆ User manual



**Generator Ratings**

Voltage(V)		Hz	Phase	P.F ( cos φ )	Prime Amps ( A )	Prime Ratings ( KW/KVA )	
440	254	50	3	0.8	32.80	20	25
415	240	50	3	0.8	34.78	20	25
400	230	50	3	0.8	36.09	20	25
380	220	50	3	0.8	37.98	20	25

●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.

**Standard Features**

Huaquan 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: ①12 months, counted on the day Huaquan sold to the first buyer; ② One year after installation; ③ 1000 running hours (accumulated); subject to the earlier one. Service and parts are available from Huaquan Power or distributors in your location.

**Engine Data**

Manufacturer / Model: Weichai Yangchai Series WP2.5D22E2, 4-stroke  
Air Intake System: Naturally intake  
Type: Four-stroke、 Direct injection、 4 Cylinders、 Wet cylinder、 Water cooling  
Cylinder Type: Water-cooled cylinder liner  
Start mode: Electric starting  
Cooling mode: Closed water cooling  
Displacement: 2.5  
Bore and Stroke: 85\*92(mm)  
Compression Ratio: 18:1  
Rated RPM: 1500rpm  
Max. Standby Power: 22KW  
Governor Type: Electronic / Mechanical

**Exhaust system**

Max Back Pressure: 10kPa

**Air Intake System**

Max Intake Restriction: 5kPa

**Fuel System**

100%( Prime Power) Load:  $\leq 235\text{g/kw.h}$

**Oil System**

Total Oil Capacity: 11L  
Oil Consumption:  $\leq 1.47\text{g/kwh}$

**Cooling System**

Total Coolant Capacity: 12L

**Alternator Specification**

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

**Alternator Data**

Manufacturer: STAMFORD/MARATHON/ LEROY-SOMER/HUAQUAN  
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 option, upon request  
 Altitude :  $\leq 1000\text{m}$   
 Exciter type: Brushless, self-exciting  
 Insulation class: H  
 Telephone influence factor(TIF):  $\leq 50$   
 THF:  $\leq 2\%$   
 Alternator Capacity: 20KW/25 KVA  
 Alternator Efficiencies: 85%  
 Air Cooling Flow: 0.09m<sup>3</sup>/s  
 Adjusting rate of stable voltage:  $\pm 0.5\%$

## Generating Set Data

Voltage Regulation:  $\geq \pm 5\%$   
 Voltage Regulation, Stead State:  $\leq \pm 1\%$   
 Sudden Voltage Warp:  $\leq +20\%$   
 Sudden Voltage Warp:  $\leq -15\%$   
 Voltage Stable Time:  $\leq 5\text{S}$   
 Voltage unbalance:  $\leq 1\%$   
 Frequency Regulation, Stead State:  $\leq 5\%$   
 Frequency Waving:  $\leq 0.5\%$   
 Sudden Frequency Warp:  $\leq +10\%$   
 Transient frequency deviation:  $\leq -7\%$   
 Frequency Recovery Time:  $\leq 3\text{S}$

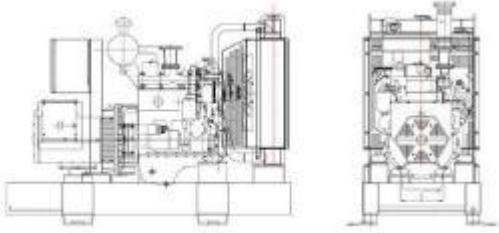
## Standard Features

- |                                |                  |                   |
|--------------------------------|------------------|-------------------|
| ◆ Standard Auto Control System | ◆ MCCB           | ◆ Special tool    |
| ◆ Starting batteries           | ◆ Battery switch | ◆ Oil Drain Valve |
| ◆ Exhaust System               | ◆ Shock pad      | ◆ Documents       |

## Options

- |                    |                        |                             |                      |
|--------------------|------------------------|-----------------------------|----------------------|
| Engine:            | ◇ Engine Heater        | ◇ Battery Charger           | ◇ Air preheater      |
| Alternator:        | ◇ Alternator Heater    | ◇ PMG                       |                      |
| Electrical System: | ◇ Remote Control Panel | ◇ Automatic Transfer Switch | ◇ Paralleling System |
| Type:              | ◇ Rainproof Type       | ◇ Soundproof Type           | ◇ Trailer Type       |
| Other:             | ◇ Spare Parts          | ◇ Daily Fuel Tank           |                      |

## Dimension & Weight



### Open Type

Overall Size: 1580(mm)× 780 (mm) ×1100 (mm)

Weight: 460kg

### Soundproof Type

Overall Size:1800 (mm) ×950 (mm) ×1260 (mm)

Weight: 700kg

## Standard Control Panel



Huaquan Power 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 Smartgen LCD display, optional Chinese and English/ Russian/ Spanish 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.

## Typical Projects

