

MODEL	HQC160GF	
Prime Power(50Hz)	160KW	200KVA
Standby Power(50Hz)	176KW	220KVA

**Standard Features**

General Features:

- ◆ Engine (DCEC Cummins 6CTAA8.3-G2)
- ◆ Radiator 50°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
- ◆ 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	262.44	160	200
415	240	50	3	0.8	278.25	160	200
400	230	50	3	0.8	288.68	160	200
380	220	50	3	0.8	303.88	160	200

●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: DCEC Cummins 6CTAA8.3-G2 , 4-cycle

Air Intake System: Turbocharged, Air/Air cooling

Fuel System: PB/W type fuel pump

Cylinder Arrangement: 6 in line

Displacement: 8.3L

Bore and Stroke: 114\*135 (mm)

Compression Ratio: 16:1

Rated RPM: 1500rpm

Max. Standby Power: 203KW/276HP

Governor Type: Electronic Speed Control System

**Exhaust system**

Exhaust Gas Flow: 29.1m<sup>3</sup>/min

Exhaust Temperature: 545°C

Max Back Pressure: 10kPa

**Air Intake System**

Max Intake Restriction:6.35kPa

Burning Capacity: 11.2m<sup>3</sup>/min

Air Flow:300m<sup>3</sup>/min

**Fuel System**

100% ( Prime Power) Load: 205g/Kw.h

75% ( Prime Power) Load: 206g/Kw.h

50% ( Prime Power) Load: 211 g/Kw.h

110% ( Prime Power) Load:41.4L/h

**Oil System**

Total Oil Capacity: 24L

Oil Consumption: ≤4g/kwh

Engine Oil Tank Capacity:18.9L

Oil Pressure at Rated RPM: 276-414kPa

**Cooling System**

Total Coolant Capacity: 40L

Thermostat: 82-95°C

Max Water Temperature: 104°C

### 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: 200 KVA

Alternator Efficiencies: 85%

Air Cooling Flow: 0.09m<sup>3</sup>/s

### Generating Set Data

Voltage Regulation:  $\geq \pm 5\%$

Voltage Regulation, Stead State:  $\leq \pm 1\%$

Sudden Voltage Warp:  $\leq +25\%$

Sudden Voltage Warp:  $\leq -20\%$

Voltage Stable Time:  $\leq 6\text{S}$

Voltage unbalance:  $\leq 1\%$

Frequency Regulation, Stead State:  $\leq 5\%$

Frequency Waving:  $\leq 1.5\%$

Sudden Frequency Warp:  $\leq +12\%$

Transient frequency deviation:  $\leq -10\%$

Frequency Recovery Time:  $\leq 5\text{S}$

### Standard Features

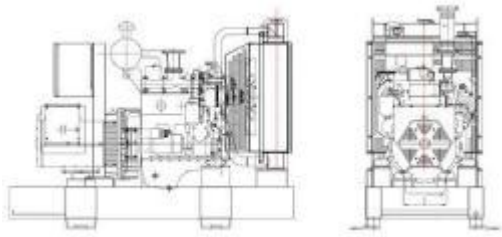
- |                                |                  |                   |
|--------------------------------|------------------|-------------------|
| ◆ Standard Auto Control System | ◆ MCCB           | ◆ Special tool    |
| ◆ Starting batteries           | ◆ Battery switch | ◆ Oil Drain Valve |
| ◆ 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: 2400(mm) × 860 (mm) × 1380 (mm)  
 Weight: 1740kg
- Soundproof Type**  
 Overall Size: 3000 (mm) × 1250 (mm) × 1730 (mm)  
 Weight: 2300kg
- Trailer Type**  
 Overall Size: 4030 (mm) × 2140 (mm) × 2510 (mm)  
 Weight: 3750kg

## 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

