

MODEL	HQC20GF	
Prime Power(50Hz)	20KW	25KVA
Standby Power(50Hz)	22KW	27.5KVA

Standard Features

General Features:

- ◆ Engine (DCEC Cummins 4B3.9-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	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: DCEC Cummins 4B3.9-G2 , 4-cycle
Air Intake System: Air natural cooled
Fuel System: A model fuel pump
Cylinder Arrangement: 4 in line
Displacement: 3.9L
Bore and Stroke: 102*120 (mm)
Compression Ratio: 16.5:1
Rated RPM: 1500rpm
Max. Standby Power: 27KW/36.7HP
Governor Type: Electronic (Std) / RSV Mechanical(Optional)

Exhaust system

Exhaust Gas Flow: 4.27m³/min
Exhaust Temperature: 410°C
Max Back Pressure: 10kPa

Air Intake System

Max Intake Restriction: 5kPa
Burning Capacity: 1.98m³/min
Air Flow: 136m³/min

Fuel System

100% (Prime Power) Load: 228 g/Kw.h
75% (Prime Power) Load: 229 g/Kw.h
50% (Prime Power) Load: 240 g/Kw.h
110% (Prime Power) Load: 6.3L/h

Oil System

Total Oil Capacity: 11L
Oil Consumption: ≤4g/kwh
Engine Oil Tank Capacity: 9.5L
Oil Pressure at Rated RPM: 345kPa

Cooling System

Total Coolant Capacity: 21L
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 : ≤1000m
 Exciter type: Brushless,self-exciting
 Insulation class: H
 Telephone influence factor(TIF): ≤50
 THF: ≤2%
 Alternator Capacity: 25 KVA
 Alternator Efficiencies: 85%
 Air Cooling Flow: 0.09m³/s

Generating Set Data

Voltage Regulation: ≥ ±5%
 Voltage Regulation, Stead State: ≤ ±1%
 Sudden Voltage Warp: ≤+25%
 Sudden Voltage Warp: ≤-20%
 Voltage Stable Time: ≤6S
 Voltage unbalance: ≤1%
 Frequency Regulation, Stead State: ≤5%
 Frequency Waving: ≤1.5%
 Sudden Frequency Warp: ≤+12%
 Transient frequency deviation: ≤-10%
 Frequency Recovery Time: ≤5S

Standard Features

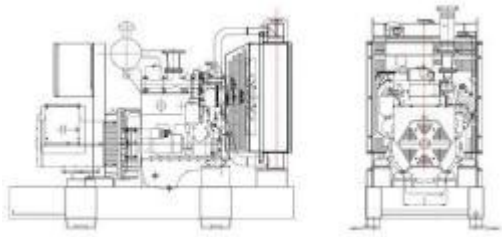
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|--------------------------------|------------------|-------------------|
| ◆ Standard Auto Control System | ◆ MCCB | ◆ Special tool |
| ◆ Starting batteries | ◆ Battery switch | ◆ Oil Drain Valve |
| ◆ Exhaust System | ◆ Shock pad | ◆ Documents |

Options

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|-------------|---------------------|-------------------|-----------------|
| Engine: | ◇ Engine Heater | ◇ Battery Charger | ◇ Air preheater |
| Alternator: | ◇ Alternator Heater | ◇ PMG | |

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|---|-----------------------------|----------------------|
| 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: 1660(mm) × 750 (mm) × 1200 (mm)
 Weight: 800kg

Soundproof Type

Overall Size: 2050 (mm) × 940 (mm) × 1390 (mm)
 Weight: 1250kg

Trailer Type

Overall Size: 2860 (mm) × 1640 (mm) × 2320 (mm)
 Weight: 1850kg

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

