

MODEL	HQC420GF	
Prime Power(50Hz)	420KW	525KVA
Standby Power(50Hz)	462KW	577.5KVA

Standard Features

- General Features:
- ◆ Engine (CCEC Cummins KTAA19-G5)
 - ◆ 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
 - ◆ 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	688.90	420	525
415	240	50	3	0.8	730.40	420	525
400	230	50	3	0.8	757.79	420	525
380	220	50	3	0.8	797.68	420	525

- 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: ① 12 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: CCEC Cummins KTAA19-G5, 4-cycle
Air Intake System: Turbo, Air/Air Cooling
Fuel System: PT type fuel pump, EFC
Cylinder Arrangement: 6 in line
Displacement: 18.9L
Bore and Stroke: 159*159 (mm)
Compression Ratio: 13.5:1
Rated RPM: 1500rpm
Max. Standby Power: 555KW/755HP
Governor Type: Electronic

Exhaust system

Exhaust Gas Flow: 1855L/s
Exhaust Temperature: 450°C
Max Back Pressure: 10kPa

Air Intake System

Max Intake Restriction: 6.23kPa
Burning Capacity: 692L/s
Air Flow: 10800 L/s

Fuel System

100% (Prime Power) Load: 207g/Kw.h
75% (Prime Power) Load: 219g/Kw.h
50% (Prime Power) Load: 220g/Kw.h
110% (Prime Power) Load: 110L/h

Oil System

Total Oil Capacity: 50L
Oil Consumption: \leq 4g/kwh
Engine Oil Tank Capacity: 38L
Oil Pressure at Rated RPM:345-483kPa

Cooling System

Total Coolant Capacity:106L
Thermostat: 82-93°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: 525 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

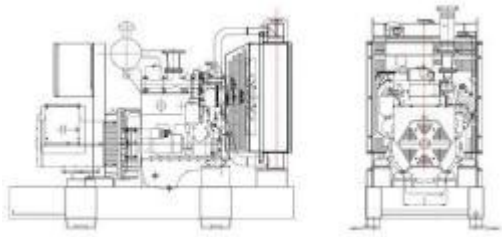
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|--------------------------------|------------------|-------------------|
| ◆ Standard Auto Control System | ◆ MCCB | ◆ Special tool |
| ◆ Starting batteries | ◆ Battery switch | ◆ Oil Drain Valve |
| ◆ Exhaust System | ◆ Shock pad | ◆ Documents |

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: 3550(mm) × 1550 (mm) × 2100 (mm)

Weight: 4000kg

Soundproof Type

Overall Size: 4600 (mm) × 2100 (mm) × 2320 (mm)

Weight: 5720kg

Trailer Type

Overall Size: * (mm) × * (mm) × * (mm)

Weight: *kg

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

