

MODEL	HQD420GF	
Prime Power(50Hz)	420KW	525KVA
Standby Power(50Hz)	462KW	577.5KVA

Standard Features

- General Features:
- ◆ Engine (Doosan Daewoo DP158LD)
 - ◆ 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: 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: Doosan Group / DP158LD
Air Intake System: Turbo charged
Type : Four-stroke、 Direct Injection、 V type、 Intercooled
Cylinder: 8 Cylinders
Displacement: 14.618L
Bore and Stroke: 128*142 (mm)
Compression Ratio: 15:1
Rated RPM: 1500rpm
Max. Standby Power: 510KW
Governor Type: Mechanical/Electronic
Idle -rpm: 800

Exhaust system

Exhaust Gas Flow:90m³/min
Exhaust Temperature:536°C

Air Intake System

Filter element air filter (Initial / final)- (mmH₂O):220/635

Fuel System

Fuel system form: P type direct injection system
25%(Prime Power) Load: 30.3 L/h
50%(Prime Power) Load:55.1 L/h
75%(Prime Power) Load: 83.4L/h
100%(Prime Power) Load: 115.1L/h

Oil System

Capacity of the oil pan (low - high):13-22L

Cooling System

Total Coolant Capacity:99L
Thermostat:71-85°C
Pressure system allows maximum pressure:49kPa

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: 525KVA
 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

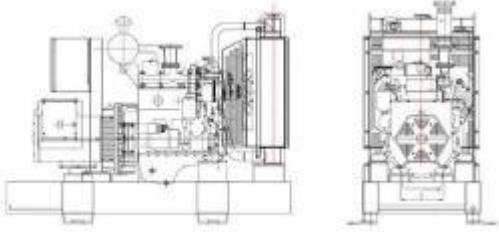
Standard Features

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

Options

- | | | | |
|--------------------|------------------------|-----------------------------|----------------------|
| 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: 3250(mm)×1550 (mm) ×2100 (mm)

Weight: 3200kg

Soundproof Type

Overall Size: 4500 (mm) ×1800 (mm) ×2300 (mm)

Weight: 4200kg

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

