

MODEL	HQY450GF	
Prime Power(50Hz)	450KW	562.5KVA
Standby Power(50Hz)	495KW	618.75KVA

Standard Features

General Features:

- ◆ Engine (Yuchai YC6T660L-D20)
- ◆ 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	738.09	450	562.5
415	240	50	3	0.8	782.55	450	562.5
400	230	50	3	0.8	811.93	450	562.5
380	220	50	3	0.8	854.64	450	562.5

●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: Yuchai YC6T660L-D20, 4-cycle

Air Intake System: Turbocharged, Air/Air cooling

Fuel System: Direct injection, ω combustion chamber

Cylinder Arrangement: 6 in line

Cylinder Type: Water-cooled cylinder liner

Compression Pressure($n \geq 200$ r/min): ≥ 3 kPa

Displacement: 16.35L

Bore and Stroke: 145*165 (mm)

Compression Ratio: 15:1

Rated RPM: 1500rpm

Max. Standby Power: 485KW

Governor Type: Electronic

Exhaust system

Max Back Pressure: 10kPa

Air Intake System

Max Intake Restriction: 5kPa

Fuel System

100% (Prime Power) Load: 192g/Kw.h

Oil System

Total Oil Capacity: 45L

Oil Consumption: ≤ 1.5 g/kwh

Engine Oil Tank Capacity: 42L

Cooling System

Total Coolant Capacity: 60L

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): ≤ 50
 THF: $\leq 2\%$
 Alternator Capacity: 562.5 KVA
 Alternator Efficiencies: 85%
 Air Cooling Flow: 0.09m³/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: $\leq 5\text{S}$
 Voltage unbalance: $\leq 1\%$
 Frequency Regulation, Stead State: $\leq 5.5\%$
 Frequency Waving: $\leq 0.5\%$
 Sudden Frequency Warp: $\leq +10\%$
 Transient frequency deviation: $\leq -7\%$
 Frequency Recovery Time: $\leq 3\text{S}$

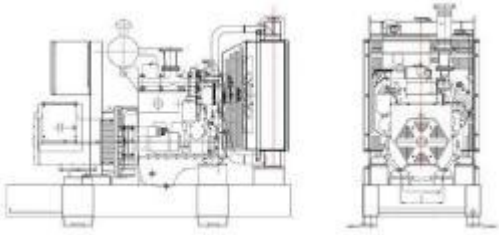
Standard Features

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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: 3420(mm) × 1280 (mm) × 1900 (mm)

Weight: 3750kg

Soundproof Type

Overall Size: 4300 (mm) × 2100 (mm) × 2320 (mm)

Weight: 5450kg

Standard Control Panel



Huaqian 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

