

## JIANGHAO GENERATOR

Genset	
Model	JHY5-300GF
Voltage	230/400V
Frequency&Speed	50HZ 1500RPM
Prime Power	301kW/376kVA
Standby Power	330kW/413kVA

# **General Engine Data**

#### Main technical parameters

Number of cylinders	6
ConfigurationV	ertical, in-line
Aspiration Turbocharged, air-a	air intercooled
Combustion system D	irect injection
Compression ratio	16.8:1
Bore	131 mm
Stroke	145 mm
Displacement	11.73 L
RotationCounterclockwise (viewed from the	flywheel end)
Firing order (viewed from the belt pulley end)	1-5-3-6-2-4
Dry weight (without radiator)	1050 kg
Wet weight (without radiator)	1100 kg

#### **Overall dimensions**

Length (from front end of radiator to rear end of air filter)

	2146 mm
Width	1125 mm
Height (with radiator and mounting support)	1450 mm

Centre of gravity (dry engine, with the center of the rear end face of the flywheel shell as the origin)

## **Fuel consumption**

Note: The density of diesel is 0.835 kg/L.

Load condition	1500 r/min	
	g/(kW∙h)	L/h
Standby	203.7	89.7
Prime	201.7	81.4
75% prime	200.8	61.1
50% prime	205.3	41.7

Engine: Yuchai YC6MJ500L-D21

- Alternator:Stamford/Leroy Somer /Hengsheng
- Controller:DeepSea/SmartGen
  /DEIF/ComAp

## Moments of rotation inertia

Engine	
Flywheel	2.35 kg ·m²

#### Performance rating

Speed droop	≤3	%
Steady state speed band	≤0.5	%

#### Test conditions

Ambient temperature	<b>25</b> °C
Atmospheric pressure	100 kPa
Relative humidity	30 %
Max. operating intake resistance	
Exhaust backpressure limit	≤ <mark>10 k</mark> Pa
Fuel temperature (fuel inlet pump)	38±2 °C

Attention: Unless otherwise explicitly specified, all parameter data are measured under standard test condition as above. If the engine is operated under other test conditions rather than the test condition above, it shall be adjusted properly according to the actual environment. Contact the Yuchai Technical Service Department for details.

## Electric system

TypeN	egative ground
Charger	
Voltage	28V
Output current	55A
Starter	
Type	Electric start, 1
Voltage	
Power	9kW
Number of teeth of flywheel	
Number of teeth of starter	



# Cooling system

Total coolant capacity	<mark>62 L</mark>
Engine coolant capacity	
Radiator coolant capacity	40 L
Pipeline coolant capacity	4 L
Engine max. outlet coolant temperature	
Thermostat operation temperature	
Initial open	<b>(80±2)</b> °C
full open	
Max. coolant temperature rise:	
-Standby power	
-Prime power	<b>8</b>
Radiator	
Cooling area	
Dry weight	163kg
Core material	Aluminum
Width of core	1035 mm
Height of core	1010 mm
Min. pressure of pressure cap	(50±5)kPa
Coolant resistance limit	
Intercooler	
Cooling area	
Core material	Aluminum
Width of core	104 <mark>0 mm</mark>
Height of core	1010 mm
Air resistance limit	12. <mark>5</mark> kPa

#### Intake system

#### Air filter

Max. intake resistance:
-Clean air filter
-Dirty air filter
-Warning of intake resistance 6.2 kPa
-Air filter typeDry-type, filter cartridge of paper
Inclination
Transverse inclination/longitudinal inclination (volume of engine oil sump: 28 L)10°/ 10
Fuel system
Injection systemMechanical pump+electronic governor
Injector
TypeP-type, with mulriple jets
Injector opening pressure
Fuel pump
Drive mode Ge ar driver
Fuel delivery pump flow @1,500 rpm
Max. fuel inlet temperature limit
Allowed fuel inlet pressure of front end of fuel delivery pump (absolute pressure)
Maximum fuel return pressure of fuel pump 20 kPa
Fuel filter
Pre- filter
Rated flow7 L/min
Max. original resistance 12 kPa

## Alternator

Pole No.	4-Pole
Exciter Type	Single bearing, Brushless, Self-excited
Power factor	0.8
Voltage adjust range	$\leq 5\%$
Insulation Grade	Н
Protection Grade	IP23/22
Phase / wire	3 phase 4 wires

- ♦ NEMAMG1.JIANGHAO, and ANSI standards compliance for temperature rise and motor starting.
- $\diamond$  Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling down stream circuit breakers to trip without collapsing the generator field.
- ♦ Self-ventilated and dripproof construction.
- ♦ Superior voltage waveform from two-thirds Pitch windings and skewed stator.
- ♦ Digital solid-state.volts-per-hertz voltage Regulator with +1% no-load to full-load regulation.



## **Control Panel**





The control module gives digital readouts of: Generator voltage; Output frequency; Engine speed;

Battery voltage;

Engine hours run.



Dimension:3050\*1120\*1700mm Weight:2570kg



Dimension:4000\*1700\*2000mm Weight:4470kg Fuel Tank Capacity:680L The **control panel** is an Digital Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring an extensive number of engine parameters, the module will display warnings, shutdown and engine status information on the back-lit LCD screen and illuminated LEDs.

# The control module has indicators for failure information:

Over speed/Low speed, Emergency stop Low oil pressure; High water temperature Failure to start Battery charger failure

#### Automatic shutdown occurs under:

Low engine oil pressure; High engine water temperature; Over speed/Low speed; Failure to start after three attempts.

#### **Electrical system**

- Maintenance-free and anti-explosion battery
- Standard breaker
- ABB breaker (optional)
- ATS (optional)
- Battery charger (optional)
- GMS monitoring (optional)

#### Packing

- Wrapping film packaging
- Tray packaging
- plywood box packaging

## Jiangsu Jianghao Generator Co.,Ltd

Address: No.1 Xixu Road, Medical High-tech Zone, Taizhou city, Jiangsu, China

Contact Person: Anthony Feng

Email: jhfsale@jhgenerator.com WhatsAPP: +86 18652649673

