

# JIANGHAO GENERATOR

Genset	
Model	JHY-80GF
Voltage	277/480V
Frequency&Speed	60HZ 1800RPM
Prime Power	79kW/99kVA
Standby Power	87kW/109kVA

# **General Engine Data**

### Main technical parameters

Number of cylinders	6
Configuration	е
Aspiration Turbocharged	i,
Combustion system Direct injection	n
Compression ratio	1
Bore	n
Stroke	n
Displacement	L
RotationCounterclockwise (viewed from the flywheel en	d)
Firing order (viewed from the belt pulley end)1-5-3-6-2-	4
Dry weight (without radiator)	g
Wet weight (without radiator)	g

# **Overall dimensions**

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

	1350 mm
Width	.850 mm
Height (with radiator and mounting support)	1100 mm

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

From the rear end face of the flywheel	412 mm
Height relative to the center of the crankshaft	142mm

# **Fuel consumption**

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

Load condition	1800	r/min
	g/(kW∙h)	L/h
Standby	229.5	26.7
Prime	225. 7	23.8
75% prime	222. 0	17.5
50% prime	221. 1	11.7

- Engine: Yuchai YC6B130Z-D20
- Alternator:Stamford/Leroy Somer
  /Hengsheng
- Controller:DeepSea/SmartGen

# /DEIF/ComAp

## Moments of rotation inertia

Engine	2.01 kg·m <sup>2</sup>
Flywheel	1.75 kg·m <sup>2</sup>

### Performance rating

Speed droop	≤0.5 %
Sleady state speed band	≤0.5 %

# Test conditions

Ambient temperature		
Atmospheric pressure		
Relative humidity		6
Max. operating intake resistance	≤5 kPa	1
Exhaust backpressure limit	≤10 kPa	1
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

Туре	Negative ground
Charger	
Voltage	
Output current	
Starter	
Туре	Electric start, 1
Voltage	
Power	
Number of teeth of flywheel	
Number of leeth of starter	11



# Cooling system

Total coolant capacity
Engine coolant capacity12 L
Radiator coolant capacity
Pipeline coolant capacity
Engine max. outlet coolant temperature
Thermostat operation temperature
Initial open
full open
Max. coolant temperature rise:
-Standby power
-Prime power
-

### Radiator

(drawing number: B7120-1316100A)	
Dry weight	
Cooling area	
Core materialCoppe	
Length of core	n
Width of core	i l
Height of core	
Min. pressure of pressure cap(50±5)kPa	
Coolant resistance limit	
Coolant pump	
Rotation speed	
Drive modePulley driver	n
Fan	
Diameter	1
Drive ratio	1
Material	el
Number of blades	6

# 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

# Intake system

#### Air filter

Max. intake resistance:
-Clean air filter
-Dirty air filter
-Warning of intake resistance
-Air filter typeDry-type, filter cartridge of paper
Inclination
Transverse inclination/longitudinal inclination (volume of engine oil sump: 20 L)

### Fuel system

Injection systemMechanical pump+ele	ctronic governor
Injector	
Туре	Mechanical
Injector opening pressure	(23~24) MPa
Fuel pump	
Drive mode	Gear driven
Fuel delivery pump flow @1,800 rpm	1.2 L/min
Max. fuel inlet temperature limit	
Allowed fuel inlet pressure of front end of fu (absolute pressure)	

# Fuel filter

Rated flow	1.2 L/min
Max. original resistance	≤7.5 kPa
Water separation efficiency at the rated flow	
Filter efficiency:	
For particles of 10 µm	≥96 %

# NEMAMG1.JIANGHAO, and ANSI standards compliance for temperature rise and motor starting.

- 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:1900\*800\*1200mm Weight:1000kg



Dimension:3000\*1100\*1700mm Weight:1900kg Fuel Tank Capacity:280L 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

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