

Jichai

Jichai 6000 SERIES DIESEL GEN-SET



2000kw /1500rpm

ENGINE SPECIFICATIONS

V-16,4-Stroke-Cycle-Diesel (6000 series)
Bore190mm
Stroke215mm
Displacement97.53L
AspirationTurbocharged-After cooled
Speed ControlElectronic Speed governing
Rated Speed1500rpm
Rated power2000kW

2000GF diesel generating set are powered by model H16V190ZLD-1 diesel engine produced by our company. Complying with National Standard "GB2820 General Specification

for Industrial Frequency Diesel Generating Sets (eqv ISO 8528) " and with reference to

"IEC34-I" rotary generator standard, the sets are equipped with high quality alternator of both home & abroad and self-made control panel according to customers requirement.

H16V190ZLD-1 diesel engine is adopted advanced governor of American WOODWARD Company. The power performance, fuel economy and reliability of the diesel engine reach world advanced level by adopting world advanced electronic control technology and lean-burnt strategy.

This genset have the features of accurate voltage regulating, good dynamic performance, less voltage waveform distortion, high efficiency, compact structure, easy to maintain, low speed, reliable and long life operation and cost-effective.

The genset can either transfer electricity directly to load or be combined in a power station with two or more than two sets. They can be used as normal and stand-by power in oil field, factory, resource development base, etc

Main Features

Engine Design

- Designed by AVL, Austria
- Intellectual Property belong to Jichai
- Triaxiality Finite Element Analysis
- Longer Stroke, More displacement
- Low Speed (1500RPM), More Reliable
- Advanced World Standard Performance

Generator

- Brushless Excitation
- -AVR
- Better Insulation and Protection

Safety

- Low Oil Pressure Auto Stop Protection
- Over Speed Auto Stop Protection
- Explosion Proof
- High Coolant Temperature Alarm
- Low Coolant Level Alarm

- Emergency Stop Device

Testing

- Strict Inspection and Factory Test for Each Gen-set
- Start Performance Test
- Load Test
- Synchronization Test
- Safety System Test

The Whole Equipment Supply

- Standard Scope of Supply
- Optional Equipment List
- Repairing Tools
- Spare Parts
- Meet the Requirement for All Accessories of Project .

Technical Support & Services

- Free Technical Support and Training Service



- Complete Electrical Protection
- 24/7 Technical Service Tel Number
- Rapid Spare Parts Supply
- After Sales Service for Generator Set Lifetime

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Model		2000GF
Engine type		H16V190ZLD
Alternator type		1FC series(SIEMENS technology)
Rated Power	kW	2000
Rated Speed	rpm	1500
Rated Frequency	Hz	50
Rated Voltage	V	10500
Rated PF		0.8
Cooling Method		Forced Water Cooled, With Radiator and Cooling
		Fan
Weight	kg	21000
Dimension	mm	7150×2180×2421

*Rating and fuel consumption based on ISO Standard conditions (Ambient temperature at 25 degree Centigrade, Atmospheric pressure at 100kPa and Relative humidity at 30%). Site rating and fuel consumption should amend according to relative standard (The table at right side for reference)

Main Specification of Engine

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Model of engine	H16V190ZLD
Rated Power(kW)	2200
Rated Speed(r/min)	1500
No. and layout of cylinders	16-cylinder, 60°Vee
Туре	Four stroke, water cooled, turbocharged and after-cooled, reliable diesel engine.
Specific oil consumption (g/kW.h)	≤200
Specific oil consumption (g/kW.h)	≤0.6
Bore(mm)	190
Stroke (mm)	215
Total displacement (L)	97.53
Governor	Electronic Governor
Fuel Injection system	High pressure direct injection system
Starting mode	24V DC electric starting motor
Direction of rotation	Counter-clockwise(facing to flywheel)
Lubrication method	Pressure and splash lubrication
Manufacturer	CNPC Jichai Co. Ltd

Main Specification of Alternator

Model of alternator	1FC series(SIEMENS technology)
Rated power(kW)	2000
Rated voltage(V)	10500
Rated speed	1500 r/min



Standard Scope Of Supply

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Rated frequency(Hz)	50
Туре	6 poles, drip proof, form wound type windings, 125°C Temperature rise.
Exciting method	Brushless
Insulation class	Н
Class of protection	IP23
Cooling	A fan at the drive end draws the cooling air
Coupling	Elastic
Voltage regulator	3 phase sensing with volts/Hz.
Voltage regulation	Less than +/-0.5% in steady state and less than +/-0.5% with 3% speed change.

assembly-Oil cooler-Cylinder block assembly-Oil Centrifugal filter-Oil sump assembly-Pressure regulating valve and oil-Cylinder head assemblyCooling SystemCrankshaft connecting rod system-Cooling fan and Driven device	pipes.
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Crankshaft connecting rod system -Cooling fan and Driven device	
-Crankshaft assembly - Radiator	
- Piston and connecting rod assembly Starting System	
-Bumper assembly - Starting motor	
-Coupling assembly - Electric-Hydraulic Governor	
Inlet and Exhaust system Monitoring and security systems	
-Air filter -Monitor	
-Inlet System -Security system	
-Exhaust System -Run/Auto/Stop control .	
-Valve mechanism Alternator	
-Exhaust gas turbocharger -6 pole, drip proof, form woun	d type
-Exhaust manifold windings	
-Corrugated pipe Spares	
-Exhaust pipe -Normal repair tools	
-Exhaust elbow -Special spare parts	
-Exhaust silencer -Technical document	
Fuel system - Certificate of quality	
-feed pump Others	
-Fuel cooler -Common base	
-Fuel injection Pump -Battery charger	
-Fuel injector -Oversize batteries	
-Improve pressure of oil pipe	
Lubricating System	
-Main oil pump	
-Pre-oil pump	

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Optional Equipment Spare Parts and Tools Fuel System -Fuel tank for 12 hours -Spare Parts for 2 years use -Fuel tank for 24 hours -Repairing Tools -Fuel tank for 48 hours -Lub oil for commissioning Cooling System Others -Horizontal Cooling Radiators and Cooling -Change control cable length according to Fan site demand -Pre-heating device for high and low -Steel generator container temperature coolant -Installation Engineering Construction -Water softening device Service

Alternator

-Other brand alternator

Certification

The products of CNPC Jichai have passed international certificates include European Union, RS etc.

-Maintenance service