



宾士动力
BS POWER

GB/T9001-2008 idt ISO9001:2008
GB/T24001-2004 idt ISO14001:2004



Quanchai Diesel Generator Set

Model No.: BQCSZ22J

Standby Power 22KW



GUANGDONG BINSHI POWER TECHNOLOGY CO., LTD.

Add: Shangtun industrial district, Liaobu Town, Dongguan City, Guangdong, China
www.binshipower.com

Powered by

Quanchai: N490D

Standby 22KW at 50Hz, 380V



Genset Technical Data:

Genset Model:	BQCSZ22J
Prime Power:	20KW
Standby Power:	22KW
Frequency/Speed:	50Hz/1500rpm
Rated Voltage:	380V
Power Factor:	0.8
Fuel consumption (100% prime load):	2.61kg/h
Base fuel tank:	50L
Phase:	three-phases, four-wires
Engine:	Quanchai
Alternator:	Shenzhou
Controller:	Smartgen
Dimensions (LxWxH):	1550*750*1000mm
Net Weight:	630kgs

- (1) PRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO8528-1. A 10% overload capability is available for a period of 1 hour within 12-hour period of operation. In accordance with ISO 3046-1.
- (2) ESP: The Standby Power Rating is applicable for supplying emergency power in variable load applications for up to 200 hours per year in accordance with ISO8528-1. Overload is not allowed.

Advantages:

- 1. Unique engine injection pressure and construction:** Unique Quanchaifuel system, 4 valves per cylinder, direct injection, turbocharged & intercooled.
- 2. Advanced production technology:** higher strengthen and reliability because of alloy cast iron cylinder body & cover and complete equilibrium structure crankshaft.
- 3. Advanced electrical control technology:** full control system design, use advanced ECU intelligent control patch, with real-time monitoring for engine. With fault reserve function.
- 4. High operating reliability:** high strength cast cylinder and crankcase provide solid crankshaft support and reduce weight. The engine has enough safety power reserve to cope with 50% over-speed.
- 5. Economy:**
 - 1) The engine set consumes less fuel and oil, so the operating costs are low, fuel consumption rate is 195-2D8 g / kWh.
 - 2) With the world's longest working time before first overhaul.

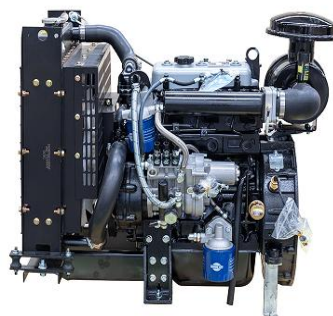
Quanchai Engine

Model: QCN490D

Manufacture: China

General features:

- 1.Direct injection combustion chamber,easy to start, low oil con
- 2.Easy to install and layout,light weight and compact structure.
- 3.Strong power , low vibration , lowsteady state speed governin
4. Spare parts have good versatility.
- 5.Power interface conforms to the SAE standard, good market i



MODEL		N490D	
BORE*STROKE(MM		90×105	
TOTAL DISPLACEMENT(L)		2.156	
REATED SPEED(R/MIN)		1500	1800
REATED POWER FOR GENERATOR SETS (KVA)		21	25
STANDBYPOWER FOR GENERATOR SETS (KVA)		24	28
STEADY STATESPEED GOVERNING RATE %		≤5	
MAX SPEED ON NO LOAD (R/MIN)		1575	
MIN SPEED ON NO LOAD (R/MIN)		800	
SPECIFIC FUEL CONSUMPTION RATE AT MAX. SPEED (G/KW·H)		≤243	
NET WEIGHT (KG)		230	
DIMENSION(L*W*H)		775×590×690 MM (WITHOUT AIR FILTER AND RADIATOR)	
ROTATION (VIEWED FROM FLYWHEEL)		COUNTER CLOCKWISE	
FLYWHEEL HOUSE SIZING		SAE4# SAE3#	
FLYWHEEL SIZING		SAE7.5" SAE10" SAE11.5"	
NUMBER OF TEETH OF THE FLYWHEEL		120	
VALVE LAYOUT			
TYPE OF THE VALVE		OVERHEAD	
VALVES PER CYLINDER		ONE INLET AND ONE EXHAUST VALVE	
VALVE CLEARANCE	INLET VALVE	0.2~0.25MM	
	EXHAUST VALVE	0.25~0.3MM	
FUEL CONSUMPTION (KG/H)			
SPEED		1500	
POWER		RATED	STANDBY

100% FULL LOAD100%		2.61	2.7
75% LOAD 75%		1.9	2.1
50% LOAD 50%		1.35	1.5
25%LOAD 25%		0.99	1.1
FUEL SYSTEM			
INJECTION TYPE		DIRECT INJECTION	
SPEED REGULATOR		MECHANICAL TYPE	
FUEL INJECTION PUMP		MECHANICAL TYPE	
INJECTOR DIAMETER		0.25MM	
INJECTOR OPENING PRESSURE		22±0.5MPA	
FUEL FITLER		SINGLE POLE ,PAPER TYPE	
FUEL		DIESEL	
LUBRICATION SYSTEM			
LUBRICATION TYPE		FORCED LUBRICATION AND SPLASH LUBRICATION	
LUBE OIL GRADE		CD-40	
LUBE OIL VOLUME		6.5L	
MAX ALLOWABLE OIL TEMPEARTURE		115℃	
OIL PRESSURE	MAX	650KPA	
	MIN	100KPA	
COOLING SYSTEM			
COOLING METHOD		FORCED WATER CIRCULATION	
WATER PUMP FLOW		80L/MIN（3000RPM WATER PUMP FLOW HEIGHT 5M）	
MOTOR WATER VOLUME		5.1L	
MAX WATER TEMPERATURE		95℃	
RADIATOR VOLUME		7 L	
OPENING TEMPERATURE /FULL OPEN TEMPERATURE OF THERMOTAT		70℃/82℃	
FAN DIAMETER（MM）		Φ410	
ELECTRICAL SYSTEM			
ALTERNATOR		14V×500W	
VOLTAGE STABILIZER		BUILT-IN VOLTAGE STABILIZER	
MOTOR		12V×3KW	
BATTERY VOLTAGE		12V	
BATTERY VOLUME		≥100AH (RECOMMENDED)	
COLD START AUXILIARY DEVICE		INLET HEATER	
INTAKE AND EXHAUST SYSTEM			
AIR FLOW KG/H		63	
EXHAUST FLOW KG/H		66	
MAX PERMISSIBLE RESTRICTIONS OF EXHAUST SYSTEM KPA		≤5	
SPEED SENSOR INTERFACE		M18X1.5	

Shenzhou Alternator

Model: SZN184F

Origin: China

General Features:

- ◆ Automatic Voltage Regulator Self regulating.
- ◆ Stator leads can be rewired to meet different voltage requirements.
- ◆ Class 'H' insulation.
- ◆ Single and double fulcrum optional, single fulcrum could match kinds of transition jacket and connecting disc.
- ◆ High-quality lubrication sealed long-time bearing.
- ◆ Accordance with GB755、 IEC60034 、 BS5000 、 VDE0530 、 CSA22.2-100 standard.
- ◆ Optional PMG permanent magnet excitation system.



Main Technical Data:

Prime power	22KW
Rated Voltage:	380V
Frequency/Speed:	50Hz/1500rpm
Power Factor:	0.8
Efficiency:	86.2%
Regulator:	AVR self-regulation
Stator:	2/3 winding pitch
Exciter Type:	Brushless excitation
Windings:	100% copper
Voltage regulation:	± 1%
Overspeed:	2250min-1
Short circuit current capability:	/
Indication of protection:	IP23
Insulation class	H
Total Harmonic Distortion:	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%
Telephone Influence Factor(TIF):	<50
Telephone Harmonic Factor(THF):	<2%

Smartgen Control System

Model: HGM6120N



Operating Environment:

Operating temperature:	-20℃～60℃
Relative humidity:	95%
Operating voltage:	DC24V(range: 18-30V, withstand voltage: 50V/5mm)

General Features:

- ◆ Compact size, reliable performance, easy to operation.
- ◆ Automatic detection function and multi-protection function, protect the generator operating safety and steady.
- ◆ Multi-interface display generator's working and alarm condition, visualized and clear to watch.
- ◆ Microcomputer control panel: set parameters such as input, output, alarm and time delay.
- ◆ Multiple operating modes: maintenance mode, manual mode and automatic mode.
- ◆ Start automatically when main supply is abnormal (over-tension, voltage too low, voltage loss).
- ◆ LCD can show all the parameters for the diesel generator.
- ◆ Protective cutoff function when the generator set failed.
- ◆ LCD alarm display, sound-light alarm control output.
- ◆ Manual/automatic/three-remotes function and electric supply/generate electricity automatic switch on-off control.
- ◆ Support RS232/RS485 communication mode (MODBUS protocol).

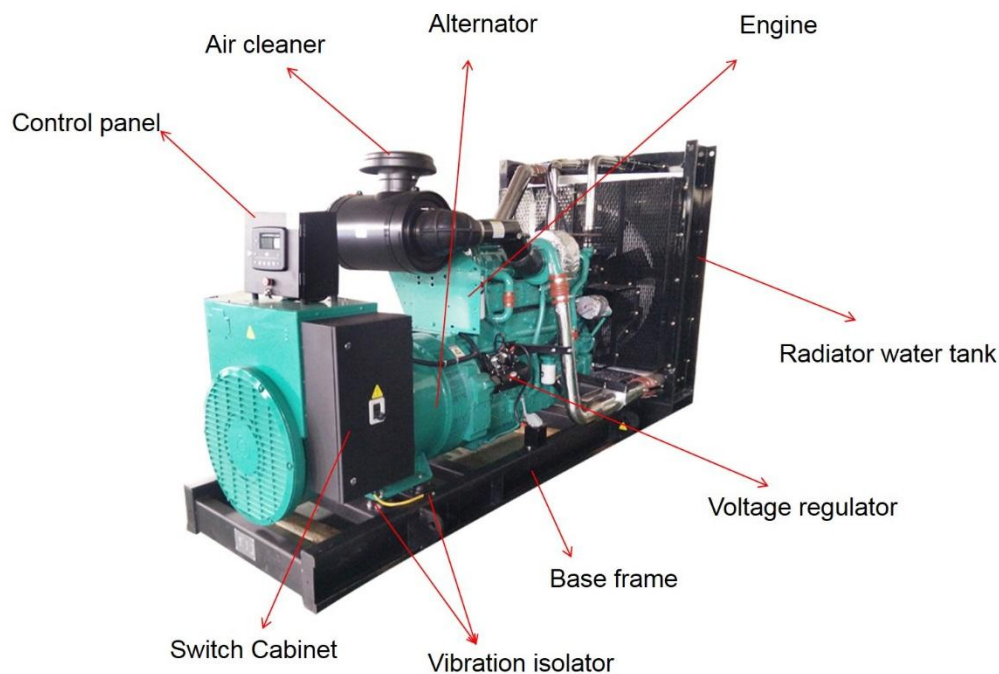
Protection:

- ◆ High/low voltage & frequency.
- ◆ Revolving speed lack of /exceed.
- ◆ Low oil pressure.
- ◆ High water temperature.
- ◆ Over current/ short trouble, emergency stop

Circuit Breaker

Capacity:	50A
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Genset Outlook



Standard Supply Scope:

- ◆ Drive fan for engine and 40℃ heat radiating water tank.
- ◆ Moulded case circuit breaker
- ◆ Battery and battery cable
- ◆ Float battery charger
- ◆ Base frame with vibration isolator
- ◆ Daily fuel tank
- ◆ Exhaust elbow, exhaust bellows, exhaust muffler
- ◆ Fuel filter, oil filter, air filter
- ◆ Tool kits

- ◆ Plastic membrane packing
- ◆ English testing report, quality certificate, service manual and warranty card

Optional Supply Scope:

- ◆ Water jacket pre-heater
- ◆ Fuel and water separator
- ◆ Fuel pre-heater
- ◆ External daily fuel tank
- ◆ ATS
- ◆ Synchronization system
- ◆ Standard container
- ◆ Rain-proof canopy
- ◆ Sound-proof canopy
- ◆ Trailer



Binshi Sales Promise

1. **Pre-sales service:** Our professional engineers give **reasonable suggestions** about selection, room design to all the technical solutions.
2. **Selling service:** we provide the **technical support** for the genset installation, test, room noise reduction, dust pollution ect.
3. We have **24 hours Standby** after-sales engineers and **sufficient original plant components** system.
4. **Quality Warranty** is according to our standard conditions: 12 months from BL date or 1,000 running hours. (whichever comes first.)

