WEICHAI GEN-SETS DATASHEET

Land Based Genset-WPG88*1

Gen-set specifications

Model	WPG88*1
Standby Rating kVA/kWe	88/70.4
Prime Rating kVA/kWe	80/64
Voltage V	400/230
Frequency Hz	50
Power Factor	0.8(lagging)
No. of Phases	3
Fuel consumption@25%/ 50% / 75%(L/h）	5.5/8.53/12.2
Fuel consumption@100% / 110%（L/h）	16.7/18.2
Sound@1m（dB • (A)）	Open≤105 dB（A）; Silence ≤85 dB（A）
Ambient temp（℃）	-10～45
Gen-set regulation class	ISO8528-5 G2
Steady-state voltage deviation	≤±2.5%;≤±5%
Transient voltage deviation （100%sudden power decrease/increase）	+25%；-20%
Steady-state frequency band	≤1.5%
Transient frequency deviation from rated frequency （100%sudden power decrease/increase）	+12%；-10%

Standard Features

	♦ Electronic governor	♦DC24 Electric starter	♦ WHC6120NC
	♦ Closed water-cooled	♦ IP23	♦H type insulation
	♦ Air filter	♦ Muffler	♦ Circuit Breaker
	♦Starting batteries	♦ with connective wires	♦ Radiator
	♦Oil Drain Valve	♦Forklift Groove	♦Shock Absorber
	♦ Color	Weichai blue (B,F)/beige canopy and black chassis (L)	
	♦ Packaging	packing case(B,F)	

Options

	◇Voltage380V/415V	◇Voltage 440V/480V	◇External fuel tank（1000L/1500L）
	◇Single Voltage 220V/230V	◇Automatic Transfer Switch	◇Alternator heater
	◇Engine Heater (water)	◇PMG/AREP	

Engine

- Weichai **WP4.1** series, 4 cylinder, in-line 4 stroke, radiator cooled engine
- Well-designed air handling system with
  - Dry type, Replaceable paper element air cleaner with restriction indicator
  - Air to air after cooling
  - Optimized turbocharger for increased altitude capabilities
  - High efficiency, large heat area intercooler, reduce the air temperature after the intercooler
- Fuel system with A1 class electronic governing
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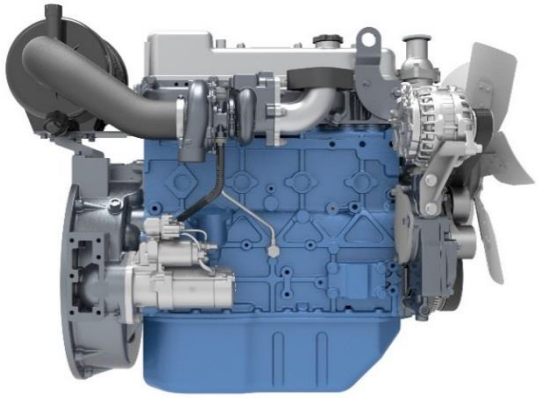
- Standard integral set-mounted radiator system, designed and tested for 50°C ambient temperature
- First fill of lube oil and coolant
- Electrical starter motor with soft start engagement feature
- Intelligent fuel injection technology to start fast guarantee
- Battery charging alternator
- 2 x 12 V DC batteries



Alternator

- Brushless type, Screen protected, Revolving field, Self excited alternator conforming to IEC 60034-1
- Best in class efficiency
- Steel casing
- Compact design with sealed bearings for longer life and lesser maintenance
- IP23 standard protection level
- Impregnation on all wound components for better mechanical strength

Control Module Specifications

The WHC6120NC is an Auto Mains Failure Control Module

- Back-lit LCD display
- 3 Phase generator and 3 Phase Mains monitoring
- Monitoring speed, frequency, voltage, current, oil pressure, coolant temperature and fuel level
- Display warning, shutdown and engine status information
- Hours counter provides accurate information for monitoring and maintenance

Engine specifications	
Make	Weichai
Mode	WP4.1D80E200
Rated Speed r/min	1500
Prime Power kW	72
Cooling	Liquid cooled
Governor	Electronic
Aspiration	Turbocharged
No. of cylinders	4,in-line
Bore (mm) x Stroke (mm)	105*118
Displacement (L)	4.087
Starting system	24VDC Electrical
Total coolant capacity (L)	22.9
Total lubrication system capacity (L)	13
Cooling fan airflow（m^3/min）	190
Exhaust Temperature (°C)	≤570
Recommended air flow @ PRP (m^3/min)	4.1
Exhaust back pressure (mBar)	≤50
Radiator design temperature（℃）	45

Alternator specifications	
Make	WEICHAI
Alternator Frame	WHA-80-4/0.4
Exciter Type	Self-excitation
Enclosure	IP23
Voltage regulation	≤±1%
Class of Insulation	H
Winding Pitch	2/3
Rotor	Single bearing

Remarks

Prime power(PRP)

Prime power is defined as being the maximum power which a generating set is capable of delivering continuously while supplying a available electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufactures.

The permissible average power output, over 24h of operation shall not exceed 70% of the PRP unless otherwise agreed by the RIC engine manufacturer.

Emergency standby power(ESP)

Emergency standby power is defined as the maximum power available during a available electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200h of operation per year with the with the maintenance intervals and procedures being carried out as prescribed by the manufactures.

The permissible average power output, over 24h of operation shall not exceed 70% of the ESP unless otherwise agreed by the RIC engine manufacturer.

Standard Conditions

STANDARD CONDITIONS
Standard operating environment: ambient temperature is 5℃~40℃,the altitude is less than 1000m,the relative humidity is less than 90%(25℃),and there is no dust, sand dust, salt fog, mold, condensation environment, etc. **If the operating environment exceeds the above requirements, please contact the factory and consult.**

Ambient adaptability protection measures for alternators

Ambient type	Ambient description	Measures of protection
General Ambient	The air is clean and dry, the humidity is ≤90%, and the distance from the coastline is ≥ 30km; Non-industrial ambient (chemical splash, acid-base steam, corrosive environment, etc.)	standard configuration
Humid Ambient	The humidity above 90% or condensation occurs	Anti-condensation heating
Salt spray Ambient	Salt fog crystals are produced in seaside (< 30km from the coastline) or island Ambient	Anti-condensation heating; Spray three-proof paint on winding surface; Spraying epoxy protection for parts and structures.
Dust Ambient	The ambient where mining, building construction, desert Gobi or sandstorm occur	Improve the protection level of the alternator to IP44; Install filters.

If you need to use protective measures beyond the standard, please contact the factory and consult.

Special working condition

If the operating conditions of the generator meet the following conditions, please contact the factory and consult.

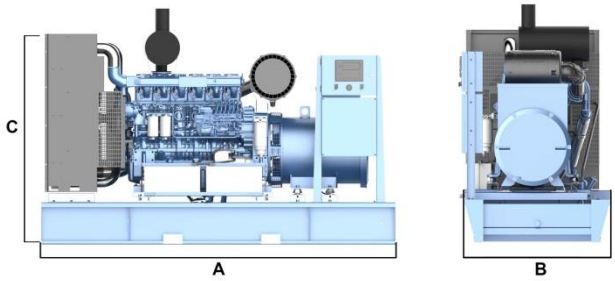
- Multistage parallel operation
- Grid-connected operation
- As the main power supply, it runs continuously for a long time
- The load includes a high power motor type load
- Capacitive load
- Special ambient such as high temperature, cold and plateau

Typical Enclosed Genset Dimensions

Genset Model	Length A(mm)	Width B(mm)	Height C(mm)	Wet Weight (kg)	Standard Fuel tank Capacity (L)
WPG88B1	1930	860	1218	995	/
WPG88F1	1930	860	1218	1095	105
WPG88L1	2880	1050	1600	1540	180

*:Include coolant and oil

Open genset



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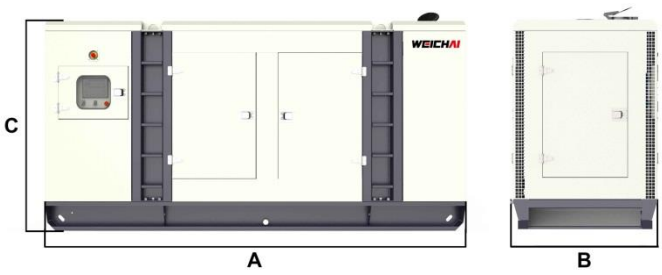

Availability Details
➢ Air intake system: Air filter; ➢ Cooling system: Closed-loop cooling radiator; ➢ Fume extraction system: Expansion pipe, muffler and mating flange; ➢ Fuel system: Inlet return port connector, fuel filter; ➢ Lubrication system: Oil pan, oil filter; ➢ Vibration damping system: Rubber shock absorber; ➢ Electrical system: Control screen and switch cabinet: ➢ Silent System: Silencing box/container (silent unit configuration) Note 1: Silent generator sets (L Series, C Series) can be used directly after installation on the ground, without the need for separate installation accessories, and open generator sets require appropriate installation accessories to install fume extraction systems, etc. Note 2: The factory does not provide on-site installation accessories such as exhaust straight pipe, elbow, radiator shroud, etc. to the unit itself. The buyer needs to consider the installation of the accessories and the installation project in advance;