

WEICHAI GEN-SETS DATASHEET



International Land Based Genset- WPG1000*7NG



Gen-set specifications

Model	WPG1000B (C) 7NG	
Prime Rating kVA/kWe	1000/800	
Continual Rating kVA/kWe	838/670	
Voltage V	400/230	
Frequency Hz	50	
Power Factor	0.8(lagging)	
No. of Phases	3	
Sound@7m (dB·(A))	Open: ≤92.1 dB (A); Silence: ≤85 dB (A)	
Ambient temp (°C)	-10 \sim 40 (If $<$ -10, oil and water heating; If $>$ 40, power correction)	
Altitude(m)	≤2000	
Fuel	Pipeline natural gas; MN≥85	
Gas supply pressure(kPa)	Max. inlet 50 (Special pressure, contact with company)	
Steady-state voltage deviation	≤±2.5%	
Transient voltage deviation	125% 20%	
(100%sudden power decrease/increase)	+25% ~ -20%	
Voltage steady time(s)	2	
Steady-state frequency band	≤1.5%	
Transient frequency deviation from rated		
frequency (100% sudden power	±18%	
decrease/increase)		
Frequency steady time(s)	15	

Standard Features

◆ ECU	◆DC24 Electric starter	◆ DSE 7320
◆ Closed water-cooled	◆ IP23	◆H type insulation
♦ Air filter	◆ Muffler	◆ Circuit Breaker
◆Starting batteries (Maintenance-Free)	♦ with connective wires	◆ Radiator
♦Oil Drain Valve	◆Forklift Groove	◆Shock Absorber
◆ Color	Weichai blue (B)/beige canopy and black chassis (L)	
◆ Packaging	Packing case(B)/Wrapping sheet(L)	

Options

♦Voltage380V/400V	♦Voltage 415V/440V	♦ Voltage 6.3kV/10.5kV /13.8kV
♦Single Voltage 220V/230V/240V	♦ Automatic Transfer Switch	♦ Automatic Parallel system
♦ Engine Heater (water)	♦ Engine Heater (oil	♦ Alternator heater
♦PMG/AREP		



Engine

- Baudouin **12M33NG** series, 12 cylinder, in-line 4 stroke, radiator cooled engine
- Well-designed air handling system with
 - 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
- First fill of lube oil and coolant
- NG gas regulator
- NG gas filter
- Standard integral set-mounted radiator system,
 designed and tested for 40°C ambient temperature
- Electrical starter motor with soft start engagement feature
- Intelligent fuel injection technology to start fast guarantee
- Battery charging alternator
- 24 V DC batteries



Alternator

- Brushless type, Screen protected, Revolving field, Self-excited alternator conforming to standard 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 DSE 7320 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
- Display warning, shutdown and engine status information
- Hours counter provides accurate information for monitoring and maintenance



Exhaust Temperature after recycle(°C)



Engine specifications			
Make	Baudouin		
Mode		12M33G10N0/5	
Rated Speed r/min		1500	
Prime Power kW		900	
Cooling		Close Liquid cooled	
Governor	ECU		
Aspiration	Turbocharged, Inter-cooled		
No. of cylinders	12, in-line		
Bore (mm) x Stroke (mm)	150x185		
Displacement (L)	39.2		
Starting system	24VDC Electrical		
Total coolant capacity engine/tank (L)	75.94/NA		
Radiator design temperature (°C)	40		
Lubrication system capacity (L)	146		
Load rate (%)	100	75	PEM 50
Fuel consumption (kg/h)	161.09	122.78	87.31
Fuel consumption (MJ/h)	7716	5881	7004182
Fuel consumption (m³/h) 8000 Kcal	230.33	175.56	124.84
Engine high water heat quantity(kJ/s)	401.6	300.3	183.2
Engine high water flow(m³/h)	80.6	79.2	EKTPOC778.5
Engine high water inlet/outlet Tem. (°C)	94.1/89.0	91.9/88.0	90.0/87.6
Engine high water inlet/outlet Pre. (kPa)	0.4/215	0.4/204.6	0.4/196.720
Exhaust gas heat quantity(kJ/s)	703.3	553.5	morore 391.5
Exhaust gas flow (kg/h)	3968	3041	2107
Exhaust Temperature (°C)	575	596	7УСКО-Н584
Exhaust back pressure (mbar)		75	

Alternator specifications	
Make	LEROY-SOMER
Alternator Frame	TAL A49 E
Exciter Type	Self-excitation
Enclosure	IP23
Voltage regulation	≤±1%
Class of Insulation	Н

Heating water120/0.5Mpa steam 190/1MPa steam 220



Winding Pitch	2/3
Rotor	Double bearing

Remarks

Prime Rating (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.

Continual Rating (COP):

These ratings are applicable for supplying continuous electrical power (at 100% load) in the event of a utility power failure. There is no limitation to the annual hours of operation under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed.

Standard Reference Conditions

Standard operating environment: ambient temperature is $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$, the altitude is less than 1000m,the relative humidity is less than 90%(25 $^{\circ}\text{C}$) and there is no dust\stand dust\salt fog\mold\condensation environment, etc.

Fuel consumption data at full load with diesel fuel with specific gravity of 0.726 kg/N m³ and low calorific value of 47.9 MJ/kg.

If the operating environment exceeds the above requirements, please contact with the factory.

Typical Genset Dimensions Wet Weight Width Height Length A(mm) **Note G**enset Model C(mm) B(mm) (kg) WPG1000B7NG 6378 2192 2593 8800 WPG1000C7NG 12192 2438 2591 16400

Note: This size cannot be used for design, for design, please contact with company.

