ANT ENERGY GEN-SETS DATASHEET

Gen-set specifications

Model	WPG125B (L) 9NG		
Prime Rating kVA/kWe	125/100		
Continual Rating kVA/kWe	100/80		
Voltage V	400/230		
Frequency Hz	50		
Power Factor	0.8(lagging)		
No. of Phases	3		
Sound@7m(dB·(A))	Open: ≤99 dB(A); Silence: ≤85 dB(A)		
Ambient temp (°C)	-10 \sim 40 (If $<$ -10 , oil and water heating; If $>$ 40 , power correction		
Altitude(m)	≤1000		
Fuel	Pipeline natural gas ; MN≥80		
Gas supply pressure(bar)	Max. inlet 2bar (Special pressure, contact with company)		
Steady-state voltage deviation	≤±2.5%		
Transient voltage deviation (100%sudden power decrease/50% increase)	+25% ~ -20%		
Voltage steady time(s)	6		
Steady-state frequency band	≤1.5%		
Transient frequency deviation from rated	100% sudden power decrease≤+12% ;		
frequency	50% sudden power increase≤-20%		
Frequency steady time(s)	5		

Standard Features

◆ ECU	◆DC24 Electric starter	◆ DSE 6120MKIII	
♦ 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)/beige canopy and black chas	ssis (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		

- Weichai **WP6NG** series, 6 cylinder, in-line 4 stroke, radiator cooled engine
- Well-designed air handling system with
 - Air cleaner
 - Replaceable paper element air cleaner with restriction indicator
 - Optimized turbocharger for increased altitude capabilities
 - High efficiency, large heat area intercooler, reduce the air temperature after the intercooler
- MG gas regulator
- MG 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



- Brushless type, Screen protected, Revolving field, Self excited alternator conforming to IS/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 DSE6120MKIII 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



Engine specifications				
Make	WEICHAI			
Mode	WP6D200E300NG			
Rated Speed r/min		1500		
Prime Power kW		120		
Cooling		Close Liquid cooled		
Governor	ECU			
Aspiration	Turbocharged, Inter-cooled			
No. of cylinders	6, in-line			
Bore (mm) x Stroke (mm)	105x130			
Displacement (L)	6.75			
Starting system	24VDC Electrical			
Total coolant capacity engine/tank (L)	8/11.3			
Radiator design temperature (°C)	40			
Lubrication system capacity (L)	18			
Load rate (%)	100 75 50			
Fuel consumption (kg/h)	22.74	21.00	15.00	
Engine high water heat quantity(kJ/s)	90.0	83.0	69.0	
Engine high water flow(m³/h)	10.8	10.8	10.8	
Engine high water inlet/outlet Tem. (°C)	75.8/81.0	/	/	
Engine high water inlet/outlet Pre. (kPa)	13/37.5	/	/	
Exhaust gas heat quantity(kJ/s)	99.77	91.00	53.03	
Exhaust gas flow (kg/h)	602.74	456.00	315.00	
Exhaust Temperature (°C)	549 525 530		530	
Exhaust back pressure (mbar)	75			
Exhaust Temperature after recycle(°C)	Heating water120/0.5Mpa steam 190/1MPa steam 220			

Alternator specifications		
Make	WEICHAI or LERYSOMER	
Alternator Frame	WHA-125-4/0.4 or TAL A44 E	
Exciter Type	Self-excitation	
Enclosure	IP23	
Voltage regulation	≤±1%	
Class of Insulation	Н	
Winding Pitch	2/3	
Rotor	Single 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 gas fuel with specific gravity of 0.726 kg/N m3and low calorific value of 47.9 MJ/kg.

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

Typical Genset Dimensions					
Genset Model	Length A(mm)	Width B(mm)	Height C(mm)	Wet Weight (kg)	Note
WPG125B9NG	2500	960	1600	1550	
WPG125L9NG	3200	1100	1850	2040	

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

