500 kVA CNG Generator Set

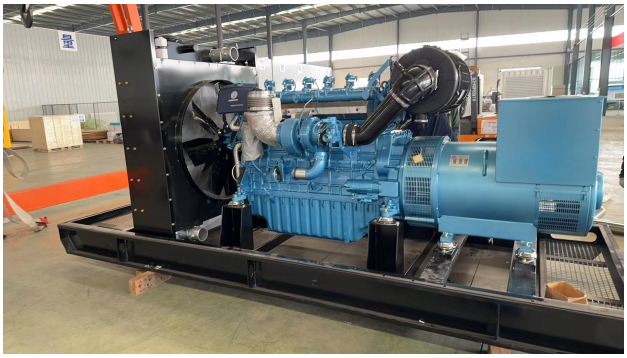
Simplified Technical Data Sheet | Model PLT-500GF | 50 Hz | Baudouin

PRIME

400 kW / 500 kVA

STANDBY 440 kW / 550 kVA

PRODUCT OVERVIEW



OPEN TYPE



SILENT TYPE

MAIN SPECIFICATIONS

Model	PLT-500GF	**Fuel**	CNG / natural gas
Prime power	400 kW / 500 kVA	**Standby power**	440 kW / 550 kVA
Rated voltage	400/230 V	**Rated current**	720 A
Frequency	50 Hz	**Rated speed**	1500 rpm
Power factor	0.8	**Configuration**	Open or silent
Controller	SmartGen HGM6110N	**Speed governor**	Electronic
Continuous power	300 kW / 375 kVA	**Electrical efficiency**	35% at 100% load

Rating basis: altitude below 1000 m and ambient temperature below 40 °C. Other voltages: 380/220 V, 415/240 V and 440/254 V on request.

ENGINE AND ALTERNATOR

GAS ENGINE	
Model	Pulita Baudouin / 6M33D450E310NG
Engine rated power	450 kW
Configuration	Inline, 4-stroke, 6-cylinder
Bore x stroke	150 x 185 mm
Displacement	19.6 L
Mean piston speed	9.25 m/s
Compression ratio	11:1
Aspiration	Turbocharged and intercooled
Cooling	Closed-loop water cooling
Ignition / start	Electronic / electric start
Oil pressure / temp.	345-483 kPa / <80 °C
Max. exhaust temp.	600 °C ±25 °C

ALTERNATOR	
Model	Pulita / FD5M
Rated output	400 kW / 500 kVA
Standby output	440 kW / 550 kVA
Connection	3-phase, 4-wire
Power factor	0.8
Excitation	Brushless
Voltage regulation	Automatic AVR
Insulation	Class H
Protection	IP23
Cooling	Air cooled

LOAD	GAS CONSUMPTION	OPERATING REQUIREMENTS
100% prime	120 m³/h	20 kPa nominal. The listed range is 20-50 kPa.
75% prime	96 m³/h	Methane >80%. Supply gas must be free of liquid water.
50% prime	64 m³/h	Humidity <60%. Suggested lubricating oil: 15W-40 CD/F.

Listed specific gas consumption: 0.3 m³/kWh.

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CONTROLLER AND PROTECTION

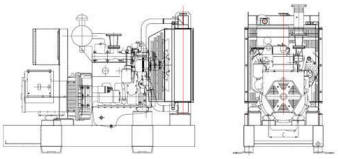


SmartGen HGM6110N
Starts and stops the generator remotely. Provides LCD monitoring, alarms and USB configuration.

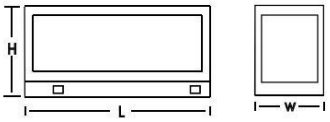
Protection functions
Monitors engine speed, oil pressure and coolant temperature, with generator electrical protection and start-failure alarms.

Controller functions: SmartGen HGM6100N series manual. Panel image is for reference.

DIMENSIONS AND CONFIGURATION



OPEN TYPE
3800 x 1450 x 2000 mm
Gross weight: 4300 kg



SILENT TYPE
5000 x 2038 x 2591 mm
Gross weight: 5500 kg
Canopy sound level: 70-75 dB*
Canopy included with silent type

Dimensions are listed as L x W x H. Confirm the final shipping dimensions. *Canopy sound level is listed without a measurement distance or test conditions.

STANDARD SUPPLY SCOPE

1. Gas engine
2. Brushless alternator with AVR
3. Digital controller and control cabinet
4. Steel base frame with vibration isolators
5. Gas pressure regulator
6. Woodward ignition system
7. Venturi air-fuel mixer
8. Electronic speed governor
9. Flame arrester
10. Explosion-protection system
11. MCCB, radiator fan, muffler and air filter
12. Two 12 V maintenance-free starting batteries
13. Installation accessories, toolkit and manuals

CNG ACCESSORIES AND OPTIONS

CNG PRMS	Listed as included. The two listed stages reduce pressure from 20 MPa to 200 kPa and then to 20 kPa. Confirm how the listed 2-5 kPa pipeline pressure relates to the 20 kPa engine inlet.

WARRANTY

15 months or 1500 operating hours from shipment, whichever comes first. Coverage applies to verified generator set defects and excludes natural disasters, transport or handling damage, improper operation and other external causes. We supply covered spare parts free of charge. After the warranty period, spare parts are available at cost.

Confirm technical data and supplied equipment in the final order documents.