

SPECIFICATION SHEET: 125kVA SILENT DG SET

125kVA

Powered by:

AL Engine Model H6G4DE125

125kVA at 50 Hz

GENERAL

GENLITE make Silent DG sets are available in the range of 12.5kVA to 250kVA with 'Ashok Leyland' Diesel Engines. 125kVA GENLITE-AL SDG Set is factory assemble pre-aligned and pre-tested ready to use set incorporating the following:

ENGINE

Ashok Leyland make diesel engine H6G4DE125 which is a 6 Cylinder, 4 stroke in-line water cooled engine with rated HP output of 155.5 HP (116 kWm), with electric start and designed to run at 1500 rpm continuous on 100% load & also capable to take 10% overload for 1 hours out of 12 hours of operation. Complies with current CPCB IV+ emission norms (as per GSR.436 (E)- MoEF, Govt. of India)

ENGINE AND BLOCK

- Optimized cast Iron Cylinder block with optimum distribution of forces
- Drop Forged Steel Connecting Rods.
- Crankshaft hardened bearing surfaces and fillets for moderate Load on main and big end bearing.
- Keystone Top Compression rings for long service life.
- Replaceable valve guide and valve seats.
- Lift eyelets
- SAE3 Flywheel Housing and SAE10 Flywheel Coupling size.
- Fixed Integrated Radiator.

LUBRICATION SYSTEM

- Full flow disposable spin-on oil filter for extra high filtration.
- Deep front Oil sump
- Short Oil dipstick at front
- Integrated full flow oil cooler, side mounted
- Recommended Oil - Gulf Leypower XLE
- Oil Change Period 750hrs or 1 Year whichever is earlier

FUEL SYSTEM

- Common Rail System (CRS)
- Five-hole fuel Injection nozzle
- Spin on type fuel filter for longer duration
- Electronic Governor -A0 Class

INTAKE AND EXHAUST SYSTEM

- Exhaust connected with Diesel Oxidation Catalyst (DOC) [Convert CO & HC in CO₂ & H₂O]
- DOC connected with Selective Catalytic Reduction (SCR) [Convert NO_x in NO₂ & H₂]
- Residential type Exhaust Silencer

COOLING SYSTEM

- Poly V Belt driven, maintenance free coolant pump with high degree of efficiency.
- Efficient cooling with accurate cooling control through a water distribution duct in the cylinder block.
- Reliable thermostat with minimum pressure drops.
- Aluminium Radiator with pusher fan. Electronic Control Unit (ECU)
- Precise control of Injection quantity / Timing
- Self-monitoring and diagnostic functions
- Higher Performance of Engine
- Meet Stringent emission norms through electronic control
- Monitoring Parameters – NO_x, HC & CO level, Adblue level, Pressure value, Temperature, Engine speed.
- Control Parameters – Rail Pressure & Delivery of fuel, Performance deterioration on OBD II noncompliance.

ALTERNATOR

Leroy Somer, Crompton Greaves or Stamford - make 125 KVA single bearing alternator suitable for operation at 1500 rpm, 0.8 pf (lag) suitable for 50 Hz, 3 phase, 4 wire system, conforming to BS 5000 / IS 4722. The Alternators are brushless type, screen protected, drip proof, revolving field, self-excited, self-regulated through an AVR.

ACCOUSTIC ENCLOSURE

The acoustic enclosure is made of 1.6 mm thick CRCA steel sheets and C Type sheet metal base frame of 2.5 mm thick CRCA Steel Sheet, painted in White & Blue shade. The walls of the enclosure are insulated with fire retardant foam to ensure sound level of 75 dBA at 1mtr as specified by CPCB. The Key Features of the Enclosure are:

- Specially designed to meet CPCB norms of 75 dBA @ 1mtr at 75% load
- Four-point lifting for easy handling
- Made on special purpose CNC machines for consistent quality & workmanship
- CRCA used is Powder coated and pretreated in 9 Stage pre-treatment plant for long Lasting service life and superior finish
- With UV resistant powder coating.
- Insulation material duly tested by ARAI and confirms to HF1 class for flammability as per UL94 clause 12.1.6.
- Flush styling - no projections
- Fluid drains for lube oil and fuel
- Fuel filling point
- MS tank with Inlet and outlet arrangement with Drain Plug and Air Vent.
- Residential Silencer inside Canopy.



Dimension and specification are only indicative. Product innovation is a continuous process, hence data given is subject to change without notice.

OTHER FEATURES

- Robust, Compact, Fuel efficient Diesel Generator sets designed to operate under arduous site conditions
- Latest Technology & Highly Reliable.
- Highly Engineered for Optimized Power Solutions.
- Designed to operate continually 24 x 7 @ 100% load.
- Better Fuel Consumption.
- Low Running cost.
- Compact Footprint.
- Easy access for maintenance.

CONTROL PANEL

The control panel incorporates Ashok Leyland (Sedemac GC1206) Genset controller, a modern and feature rich Genset controllers with user-friendly HMI and full graphics LCD. The GC1206 controller come bundled with highly versatile software & extensive I/O's, and thereby support a wide variety of industry standard features in Diesel Gensets. They also offer unique features such as electronic governing for engines with common rail fuel systems. the GC1206 controllers can subsume the electronic governing duty for the engine and offer tight speed governing performance within ISO 8528: G3 class limits.

- AMF, Manual and Remote start / stop modes for 1-ph & 3-ph Gensets.
- RS 232/485 port for communication with GSM modem.
- Full graphics LCD display, power saving mode, real time clock.
- Operating / Storage Temperature -20 to 65°C
- Meets IP-65 class for front (with optional gasket) as per IEC / BS EN 60529.
- Engine start, engine stop, pre-heat, charge alt interface.



DISPLAY - GENSET ELECTRICAL VALUES	INTERNAL ALARMS ON CONTROLLER
Generator Voltage (Ph-N)	Emergency Stop
Generator Voltage (Ph-Ph)	Low Lube Oil Pressure
Generator Frequency	Engine Under/ Over frequency
Generator Load Current	Genset Under / Over voltage
Generator Line & Total kW	Genset Battery low voltage
Generator Line & Total kVA	Genset Overload
Generator KVAr	High Coolant temperature
Generator Power Count (kWh, kVAh, kVArh)	Unbalanced Load
Generator Line & Average Power Factor	Genset fail to start
DISPLAY - ENGINE PARAMETERS	DISPLAY - MAINS ELECTRICAL VALUES
Engine Speed	Mains Voltage (Ph-N)
Oil Pressure	Mains Voltage (Ph-Ph)
Coolant Temperature	Mains Frequency
Engine Battery Volts	
Balance Fuel	
Engine Run Hour, Date & Time	

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Detailed Technical Specification		
Technical Data	125 kVA @ 1500 RPM	
No. of cylinders and configuration	In-line 6	
Method of operation	4-stroke	
Rated Current	Amp 173.75	
Bore, mm (in.)	104 (4.094)	
Stroke, mm (in.)	118 (4.646)	
Displacement, Ltrs.	6.011	
Compression Ratio	16.5 ± 0.5 : 1	
Fuel Tank Capacity Ltrs.	250	
Coolant Capacity approx. Ltrs.	20.5	
Lube Oil Capacity	18	
DG weight approx. Kg	2050	
Performance		
With fan, kWm (hp) at	kWm	HP
Prime Power	116.0	155.5
Max Standby Power	127.6	171.1
Governing	Electronic - A0 Class	
Lube Oil specification	Gulf Leypower XLE	
Oil Change Period	750 Hours Or 1 Year, Whichever Is Earlier	
Starting System / Battery	12 V / 90 Ah	
Generator Controller	GC 1206	
Exhaust After Treatment System (EATS)	DOC + SCR	
Safety Protection		
Safety Protection HWT	Yes	
Safety Protection for Low Lube Oil Pressure Trip	Yes	
Safety Protection for Over Speed Trip	Yes	
Safety Protection for Low Fuel Level	Yes	
Dg Size		
Length (Mm)	3100	
Width (Mm)	1300	
Height (Mm)	1610	

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