DATA SHEET SPECIFICATION

UPG-P2250 50 Hz

Genset Model	UPG-P2250
Engine Model	Perkins 4016-61TRG3
Alternator Model	LSA52.3L9
Controller Model	DSE 7320

Dimension			
Closed type(mm)		Open type(mm)	
Length	12000	Length	6500
Width	2440	Width	2300
Height	4300	Height	3300
Weight(kg)	27900	Weight(kg)	15700

POWERED BY

Perkins Diesel Power | LEROY SOMER | DSE

- Three phase
- water cooled
- DIESEL
- Battery Charging Alternator

Ratings @ 0.8 PF

VOLTAGE	FREQENCY	PRIME RATING		STAND-BY RATING	
230-400 V	50 Hz	2250 kva	1800 kw	2500 kva	2000 kw

Prime

These ratings are applicable for supplying continuous electrical power (at variable load). There is no annual hours limitation and this genset can supply 10% overload for 1 hour in 12 hours

Stand by

These ratings are applicable for supplying continuous electrical power(at variable load) in the case of emergency power supply. No overload is permitted on the ratings.
The alternator on this model is peak continuous rates(as defined in ISO 8528-5)

Some of the specifications are not standard on all Genset models.

Genset Standard Specification	
Model	UPG-P2250
Base frame	Heavy duty fabricated steel
Circuit breaker	ABB 3 pole MCCB(4 pole is optional)
Engine speed	1500 RPM(50HZ)
Fuel tank capacity	Not available*
Air inlet	Mounted air filter
Induction system	Turbo charged and air to air charge cooled
Combustion system	Direct injection
Fuel system	Fuel injection pump
Fuel filter	Split element
cooling system	Water-cooled
Electric Equipment	24 v starter motor and 24 v DC alternator and ECM

* Base tank not recommended for above 800 kva genset for sufficient cooling of diesel

All information in this document is substantially correct at time of printing and may be altered subsequently.

Engine Data		
Model	Perkins 4016-61TRG3	
No of cylinder & arrangement	16 - 60˚ Vee	
Compression ratio	13:1	
Aspiration	Turbo Charged	
Bore and stoke(mm)	160*190	
Rotation	Anti-clockwise viewed from flywheel end	
Governing class	ISO 8528-5 G2	
Radiator cooling air flow(m^3/sec)	55.3	
	50 Hz	
	Prime	Stand by
Gross engine power kw(hp)	1975 (2647)	2183 (2925)
at 50 % Load (l/hr)	234	-
at 75% Load (l/hr)	344	-
at 100% Load (l/hr)	470	529
Boost pressure ratio	4.0	4.0
Total lubrication system capacity (L)	237	237
Total Coolant capacity(L)	270/230	270/230

Alternator Data	
Make	LSA / Equivalent
Model	LSA52.3L9
Insulation class	H
No of bearing	1
Total harmonic content	<4%
Winding pitch	2/3
Ingress Protection	IP23
Altitude	≤1000m
Overspeed	2250 mn $^{-1}$
AVR Model	D550
Excitation system	AREP
Voltage regulation(steady)	± 0.5%
Short Circuit Capacity	300% (3 In): 10s
PMG Excitation System Available as Optional.	

Contact : +971505916054

Exhaust pipes with insulated heat resistant tape

Oil and coolant drain

Anti-vibration pads

Fuel Inlet/Outlet

Emergency stop button

Enclosure

SILENT FEATURES

- Internal /External fuel connection
- External oil drainage
- External coolant drainage
- Air inlet /outlet louvers
- Sound splitters at radiator side (only for 1000 KVA and above) (For 725-880 KVA vertical air discharge)
- Common earth connection
- 2 layers white color paint
- Cooling fan and battery charging alternator fully guarded
- Engine, radiator, fuel fill and battery can only be reached via lockable access doors

HIGLY CORROSION RESISITANCE CONSTRUCTION

- Stainless steel locks and hinges
- Body made from GI and MS steel components treated with redoxide and epoxy Gi primer and double coating enamel paint

TRANSPORTABILITY

- Tested and certified container with lifting on the top and bottom corners of the container
- Forklift pockets available (725-800 kVA)

SOUND PRESSURE LEVEL

- 80 - 85 dBA at 3 meters (standard)

customized enclosure with reduced sound pressure level available on demand

CONVENIENT ACCESS FOR MAINTENANCE:

- Original CTR main door as access for operation
- Two doors - one large door on each side (725-880 kVA)
- Two doors in one side and one door in the other side (1000-2500 kVA)
- Lockable doors with emergency opening pusher from inside
- Internal 3-4 lights
- Emergency light on top of the door

Control Panel Data	
Make	Deep Sea
Model	DSE 7320 MKII

Controller key features

The DSE 7320 is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel or by using the DSE configuration suite PC software.

Metering and Alarm indications:

- Generator frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Fuel level (Warning or shutdown) - Optional
- Hours run counter
- Battery volts
- Fail to start/stop
- Emergency stop
- Failed to reach loading voltage/frequency
- Charge fail
- Loss of magnetic pick-up signal - Optional
- Low DC voltage
- CAN diagnostics and CAN fail/error

All information in this document is substantially correct at time of printing and may be altered subsequently.

FUEL SYSTEM

On Generating Sets up to 700 KVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

Silencer noise reduction level	50 Hz
dBA	-
Max allowable pressure	50 Hz
Kpa	4.0
Exhaust gas flow m³/min	50 Hz
Prime	525
Standby	525
Exhaust gas temperature °C	50 Hz
Prime	475
Stand by	560

AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at ±1%. Nominal adjustment by means of a trim pot incorporated on the AVR.

MOTOR STARTING

An overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds, when PMG option is fitted.

COUPLING

The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

ANTI-VIBRATION MOUNTING PADS

Anti-Vibration pads are affixed between the Engine / Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.

SAFETY GUARDS

The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

FACTORY TESTS

The Generating set is load tested before dispatch All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

DOCUMENTATIONS

Operation & Maintenance manual, Circuit wiring diagrams and Commissioning / Fault Finding accompanied with the Generator.

QUALITY STANDARDS

Following standards: ISO 8528/1, ISO 3046/1, BS 5514/1.

WARRANTY

All of the Generating Sets are covered under a warranty policy for a period of 12 months. Warranty of the equipment is in line with manufacturers warranty terms & conditions.

Contact : +971505916054