DATA SHEET SPECIFICATION

UPG-P700 50 Hz

Genset Model	**UPG-P700**
Engine Model	**Perkins 2806A-E18TTAG4**
Alternator Model	**TAL 049 B**
Controller Model	**DSE 7320**

Dimension

Closed type(mm)		Open type(mm)	
Length	6000	Length	3800
Width	2320	Width	1600
Height	2600	Height	2300
Weight(kg)	9100	Weight(kg)	5180

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	706.0 kva	565.0 kw	780.0 kva	624.0 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-P700
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
Cycle	4 stroke
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

Engine Data

Model	Perkins 2806A-E18TTAG4	
No of cylinder & arrangement	6 vertical in-line	
Compression ratio	14:1	
Aspiration	Turbocharged and air to air charge cooled	
Bore and stroke(mm)	145*183	
Displacement / Cubic Capacity litres	18.1	
Rotation	Anti-clockwise, viewed from flywheel	
Governor type	Electronic	
Radiator cooling air flow(m^3/sec)	14.2	
	50 Hz/1500 RPM	
	Prime	Stand by
Gross engine power kw(hp)	623(835)	685(919)
at 50% Load(l/hr)	76.0	-
at 75% Load (l/hr)	108.0	-
at 100% Load (l/hr)	145.0	160.0
Total lubrication system capacity (L)	68.0	68.0
Total Coolant capacity(L)	110.0	110.0

Alternator Data

Make	Leroy Somer TAL / Equivalent
Model	TAL 049 B
Insulation class	H
No of bearing	1
Total harmonic content	at no load <3..5% / at linear load <5%
Winding pitch	2/3
Ingress Protection	IP23
Overspeed	2250 R.P.M
AVR Model	R150
Excitation system	SHUNT
Voltage regulation(steady)	± 0.8%
AREP or PMG Excitation System Available as Optional	

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

Contact : +971505916054

Enclosure

SILENT FEATURES:

- Lockable external fuel filling point
- 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
- powder coated galvanized canopy
- 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

- Carbon steel locks and hinges
- Body made from galvanized steel components
- treated with polyester powder coating

TRANSPORTABILITY

- Tested and certified single point lifting facility
- Forklift legs available

SOUND PRESSURE LEVEL

- 80 - 85 dBA at 3 meters (standard)

SECURITY AND SAFETY:

- Control panel viewing window in a lockable access door
- Emergency stop push button (red) fixed externally for quick access
- Cooling fan and battery charging alternator fully guarded
- Fuel fill and battery can only be reached via lockable access doors
- Exhaust silencing system totally enclosed for operator safety

Control Panel Data	
Make	Deep Sea
Model	DSE 7320 MKII

Controller key features

The DSE DSE 6120 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
· Hours run counter
· Battery volts
· Fail to start/stop
· Emergency stop
· Charge fail
· Low DC voltage

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	14
Max allowable pressure	50 Hz
Kpa	10
Exhaust gas flow m^3/min	50 Hz
Prime	119
Standby	128
Exhaust gas temperature °C	50 Hz
Prime	461
Stand by	465

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