# **UPG-P135**





## **POWERED BY**









Three phase



water cooled



DIESEL



Battery Charging Alternator

## Ratings @ 0.8 PF

VOLTAGE	FREQENCY	PRIME RATING		STANI	D-BY RATING
230/400	60 Hz	152.0 kva	121.6.0 kw	169.0 kva	135.2 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-P135		
Base frame	Heavy duty fabricated steel 3mm		
Circuit breaker	ABB 3 pole MCCB.(4 pole is optional)		
Engine speed	1800 RPM(60HZ)		
Fuel tank capacity	261 L- open / 255 L-closed		
Air inlet	Mounted air filter		
Fuel system	Fuel injection pump		
Fuel filter	Split element		
Lubrication system	Wet steel sump with filler and dipstic		
cooling system	liquid		
Electric Equipment	12 v starter motor and 12 v DC alternator, 12 v shut off slelenoid		

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

Genset Model	UPG-P135
Engine Model	<b>Perkins 1106A-70TG1</b>
Alternator Model	TAL 044 H
Controller Model	DSE 6120





Dimension				
Closed type(cm)		Open type(mm)		
Length	3200	Length	2500	
Width	1100	Width	775	
Height	1650	Height	1425	
Weight(kg)	1750	Weight(kg)	1390	

Engine Data				
Model	Perkins	1106A-70TG1		
No of cylinder & arrangement	6 vertical in-line			
Compression ratio	18.2:1			
Aspiration	Turb	o charged		
Bore and stoke(mm)	105*135			
Rotation	Anti-clockwise, viewed on flywheel			
Governing class	ISO 3046-1 Part 4 class A1			
Radiator cooling air flow(m₃/sec)	3.03			
	60 Hz			
	Prime	Stand by		
Gross engine power kw(hp)	140.5 (188.3)	155.4 (208.3)		
at 50% Load(I/hr)	18.0	7.4-13 <del>.</del> 17.1011		
at 75% Load(I/hr)	26.5	-		
at 100% Load(I/hr)	35.2	38.8		
Total lubricating oil capacity(L)	18.0	18.0		
Total Coolant capacity(L)	21.0	21.0		
Alternator Data				

Alternator Data			
Make	Leroy Somer		
Model	TAL 044 H		
Insulation class	Н		
No of wires	6 (12 option)		
No of bearing	1		
Total harmonic content	at no load<2%%,on load<5%		
Winding pitch	2/3		
Ingress Protection	IP23		
Altitude	≤1000m		
Overspeed	2250 R.P.M		
AVR Model	R120		
Excitation system	SHUNT		
Voltage regulation(steady)	±1%		
AREP or PMG Excitation System Available as Optional			



## **Enclosure**

### **SILENT FEATURES:**

- Leckable 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) 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 Faller Data				
Make	Deep Sea			
Model	DSE 6120 MKII			



### Controller key features

The 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
- Fuel level (Warning or shutdown) Optional
- · Hours run counter · Battery volts
- · Fail to start/stop
- Emergency stop · Failed to reach loading voltage/frequency
- · 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 650 KVA, the on denerating sets up to 650 kWA, 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.

Max allowable pressure	60 Hz
Кра	6
Exhaust gas flow m³/sec	60 Hz
Prime	30.53
Standby	32.29
Exhaust gas temperature °C	60 Hz
Prime	407
Stand by	407

#### **AUTOMATIC VOLTAGE REGULATOR (AVR)**

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at  $\pm 1\%$ . 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: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO

## **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.