# **UPG-P200** ₩



# **POWERED BY**









Three phase



water cooled



DIESEL



Battery Charging Alternator

# Ratings @ 0.8 PF

VOLTAGE	FREQENCY	PRIME R	RATING	STAND	-BY RATING
230/400 v	50 Hz	200.0 kva	160.0 kw	220.0 kva	176.0 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	on	
Model	UPG-P200	
Base frame	Heavy duty fabricated steel	
Circuit breaker	ABB 3 pole MCCB(4 pole is optional)	
Engine speed	1500 RPM(50HZ)	
Fuel tank capacity(L)	261 - open	
ruei tarik capacity(L)	255(403) - closed	
Air inlet	Mounted air filter	
Induction system	Turbo charged and air to charge cooled	
Combustion system	Direct injection	
Fuel system	Fuel injection pump	
Fuel filter	Split element	
cooling system	Water-cooled	
Electric Equipment	12 v starter motor and 12 v DC alternator and 12 v shut off solenoid	

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Genset Model	UPG-P200
Engine Model	Perkins 1106A-70TAG4
Alternator Model	TAL 044 L / TAL 044M
Controller Model	DSE 6120





	Dime	nsion	
Closed t	ype(mm)	Open typ	e(mm)
Length	3200	Length	2500
Width	1100	Width	775
Height	1650	Height	1425
Weight(kg)	1990	Weight(kg)	1630

	Engine Data	
Model	Perkins 110	6A-70TAG4
No of cylinder & arrangement	6 vertic	al in-line
Compression ratio	18	5.2:1
Aspiration	Turbo charge	ed after cooled
Bore and stroke(mm)	105 x 135	
Displacement / Cubic Capacity litres	7	.01
Rotation	Anti-clockwise, v	iewed on flywheel
Governor	Electronic	
Radiator cooling air flow(m³/sec)	4.7	
	50 Hz	
	Prime	Stand by
Gross engine power kw(hp)	184(247)	202(271)
at 50% Load(I/hr)	23.1	-
at 75% Load(I/hr)	34.7	-
at 100% Load(I/hr)	45.8	49.4
Total lubrication system capacity(L)	18.0	18.0
Total Coolant capacity(L)	21.0	21.0

Alternator Data			
Make	Leroy Somer TAL / Equivalent		
Model	TAL 046B / TAL 044M		
Insulation class	Н		
No of bearing	1		
Total harmonic content	at no load <2.5% / <2% at linear load <5% / <5%		
Winding pitch	2/3		
Ingress Protection	IP23		
Altitude	≤1000m		
Overspeed	2250 R.P.M		
AVR Model	R150		
Excitation system	SHUNT		
Voltage regulation(steady)	± 0.8% / ± 1%		
AREP or PMG Excitation System Available as Optional			



### **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 Pa	anel Data
Make	Deep Sea
Model	DSE 6120 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	12
Max allowable pressure	50 Hz
Кра	6
Exhaust gas flow m³/min	50 Hz
Prime	34.9
Prime Standby	34.9 36.8
	- 11-
Standby	36.8

### **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.

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