



**Generator Set Data Sheet**

MPG650KVA

PK@50Hz 650KVA/520KW

Powered by



**Main Features**



**DIESEL GENERATING SET**



**PERKINS  
2806A-E18TAG2**



**400/230V,  
380/220V**



**3 phase  
50 Hz**



**1500rpm**



**6CYLINDERS**



**62 LITRE**



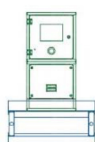
**61 LITRE**

**Standby Power: 700 KVA - 560 KW**

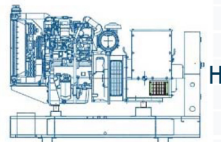
**Prime Power: 650KVA - 520KW**

**Open Skid**

Length (L) 380 cm  
Height (H) 230 cm  
Width (W) 155 cm  
Weight 4500 kg  
Daily Tank 515 L



W

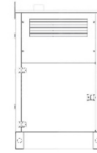


L

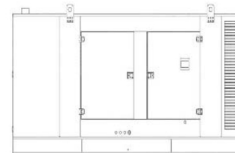
H

**Sound Proof**

Length (L) 565 cm  
Height (H) 255 cm  
Width (W) 185 cm  
Weight 6500 kg  
Daily Tank 820 L



W



L

H

Acoustic pressure level @3m

79 dBA

**ENGINE: PERKINS 2806A-E18TAG2**

Engine power output	565 kWm-758 hp
Cooling System	Water Cooled
Displacement / Capacity	18.1 Liter
No. of cylinders	6
Cylinder Arrangement	Vertical In line
Induction System	Turbocharged and air to air charge cooled
Bore and Stroke	145 x 183 mm
Cycle	4 stroke
Combustion System	Direct Injection
Compression Ratio	14.5:1
Rotation	Anti-clockwise, viewed on flywheel
Frequency and Engine Speed	50Hz & 1500rpm

Starting voltage	24V
Governor	Electronic
Oil capacity	62 Liter
Coolant capacity	61 Liter
24 V D.C. starter and charge alternator	
Replaceable fuel filter, oil filter and dry element air filter	
Cooling radiator and fan	
Starter battery (maintenance free)	
Fuel consumption at 100% load	132 L/hr.
Fuel consumption at 75% load	97 L/hr.
Fuel consumption at 50% load	66 L/hr.

## ALTERNATOR: LEROY SOMER

Rating	650KVA	Model	TAL047F
No. of bearing	1	Insulation class	H
		Wires	6
Total Harmonic Content	<3.5%	Excitation System	SHUNT
Ingress Protection	IP23	AVR Model	R150
Winding Pitch	2/3(n° 6)		
Over-speed	2250 mn <sup>-1</sup>	Voltage Regulation	±1%
Circuit Breaker Capacity	MCCB 1000Amps		

## STANDARD CANOPY

### Sound Level Design

79 dBA @ 3 meters in free space

Rigid canopy base manufactured by black steel metal sheets welded on canopy body with internal Re-enforcement and bolted on the body.

5 service doors with stainless steel door locks.

Stainless steel heavy duty door hinges.

Black steel canopy body – 2mm and 3mm treated with greasing phosphate and anticorrosion treatment with electro static power coating.

### Connection

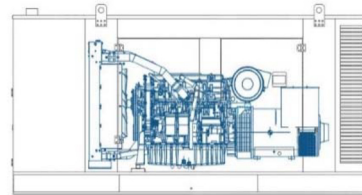
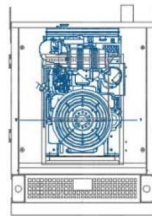
Flexible

### Sound isolation

Rockwool with perforated sheets

### Muffler

Muffler with rain cap



## CONTROL (MONITORING) SYSTEM: DEEP SEA

### Control panel model

DSE6010

The DSE6010 is an Auto Start Control Module for single gen-set 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
- Under-speed, Over-speed
- Generators volts (L-L, L-N)
- Generator current
- Engine Oil pressure
- Fail to start/ stop
- Emergency stop
- Failed to reach loading voltage / frequency
- Engine coolant temperature
- Fuel level (warning or shutdown) – Optional
- Hours run counter
- Battery volts
- Charge fail
- Low DC voltage
- CAN diagnostics and CAN fail/ error

Gen-sets can be equipped with different control panels depending on usage, such as: DSE6020, DSE7310, DSE7320 or DSE8610 (Synchronization Panel)



## OPTIONAL EQUIPMENTS

ATS (Automatic Transfer Switch)	Alternator Anti-condensation Heater
Water Jacket Heater	Load Bank
Battery Charger	Electrical Fuel Level Sensor
Fuel Water Separator	Fuel Level Protection
Electrical Fuel Transfer Pump	Spare Parts
Battery Heater	Oil Heater

## STANDARD SPECIFICATIONS

Warranty	All generating sets are covered under warranty policy for a period of 12 months in line with the manufacturers' warranty policy		
Quality Standards	The equipment meets the following standards: BS4999, BS5514, IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528		
Engine Filtration System	Air filter, Fuel filter, Oil filter. All filters have replaceable elements		
Fuel System	On generating sets up to 650KVA, the base frame design is incorporated with an integral fuel tank with a capacity of approx... 8 hours running at average load. The tank is supplied with fill cap breather, fuel feed and return pipes to the engine and drain plug	Mounting Arrangement	<p><b>Base Frame:</b></p> <p>The complete generating set is mounted as a whole in a heavy duty fabricated steel base frame.</p> <p><b>Coupling:</b></p> <p>The engine and alternator are directly coupled by means of an SAE flange. The engine flywheel is flexibly coupled to the alternator rotor</p> <p><b>Anti-Vibration Mounting Pads:</b></p> <p>Anti-vibration pads are affixed between the engine/ alternator feet and the base frame thus ensuring complete vibration isolation of the rotating assembly</p> <p><b>Safety Guards:</b></p> <p>The fan &amp; fan drive along with the battery charging alternator are safety guard protected for personnel protection</p> <p>The generating set is load tested before dispatch. All protective devices control functions and site load conditions are simulated. The generator and its systems are checked before dispatch</p> <p>All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability</p>
Cooling Radiator	Radiator and cooling fan, complete with safety guards, designed to cool the engines at high ambient temperatures		
Exhaust System	<p>Heavy duty industrial exhaust silencer</p> <p>Silencer noise reduction level: 22 (dB)</p> <p>Maximum allowable back pressure: 10 (kPa)</p>		
Documentation	Operation & Maintenance manual, circuit wiring diagrams and commissioning / fault finding instruction leaflets are accompanied with the generator	<p><b>Factory Tests:</b></p> <p><b>Equipment Finishing:</b></p>	