

### SPECTRO ELECTRICAL EQUIPMENT CO.





Generator Set Data Sheet

MPG400KVA

PK@50Hz 400KVA/320KW





#### Main Features



DIESEL GENERATING



**PERKINS** 2206A-E13TAG3



400/230V, 380/220V



3 phase 50 Hz





6CYLINDERS

Standby Power: 450 KVA - 360 KW



40 LITRE



51.4 LITRE

Prime Power: 400KVA - 320 KW

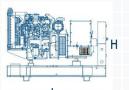
### Open Skid

350 cm Length (L) 210 cm Height (H) Width (W) 125 cm Weight 2800 kg

**Daily Tank** 

415 L

W

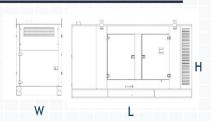


**Sound Proof** 

540 cm Length (L) Height (H) 245 cm Width (W) 155 cm Weight 5150 kg

**Daily Tank** 740 L

Acoustic pressure level @3m



79 dBA

# ENGINE: PERKINS 2206A-E13TAG3

Engine power output 350 kWm-468 hp **Cooling System** Water Cooled

Displacement / Capacity 12.5 Liter

No. of cylinders

Cylinder Arrangement

**Induction System** Turbocharged and air to air charge cooled 130 x 157 mm

Vertical In line

Direct Injection

50Hz & 1500rpm

16.3:1 nominal

4 stroke

Bore and Stroke Cycle

**Combustion System Compression Ratio** 

Rotation Anti-clockwise, viewed on flywheel

Frequency and Engine Speed

Starting voltage 24V

Governor Electronic Oil capacity 40 Liter Coolant capacity 51.4 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)

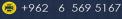
Fuel consumption at 100% load 81 I /hr. Fuel consumption at 75% load 62 L/hr. Fuel consumption at 50% load 42 L/hr.

💡 Aqaba Special Economic Zone Authority, Al-Herafeya-Ahmad Kharma Building, Jordan 🥏 218 Aqaba 77110 Jordan



www.spectroplus.com







#### SPECTRO ELECTRICAL EQUIPMENT CO.

Insulation class

MPG 400KVA

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Powered by Perkins SOMER



### ALTERNATOR: LEROY SOMER

**Total Harmonic Content** 

Rating Model 400KVA TAL047A

No. of bearing Н Wires

<3.5% on load **Excitation System** SHUNT

**AVR Model Ingress Protection** IP23 R150 Winding Pitch 2/3(n° 6)

Over-speed 2250 mn<sup>-1</sup> Voltage Regulation ±1%

**Circuit Breaker Capacity** MCCB 630Amps

## STANDARD CANOPY

79 dBA @ 3 meters in free space Sound Level

Rigid canopy base manufactured by black steel metal sheets welded on canopy body with internal Re-Design

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

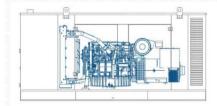
electro static power coating.

Flexible Connection

Sound isolation Rockwool with perforated sheets

Muffler Muffler with rain cap





# CONTROL (MONITORING) SYSTEM: DEEP SEA

DSE6010 Control panel model

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)

















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### OPTIONAL EQUIPMENTS

ATS (Automatic Transfer Switch)

Water Jacket Heater

**Battery Charger** 

**Fuel Water Separator** 

**Electrical Fuel Transfer Pump** 

**Battery Heater** 

Alternator Anti-condensation Heater

Load Bank

**Electrical Fuel Level Sensor** 

**Fuel Level Protection** 

**Spare Parts** 

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	
VVdIIdIILV	All delief action sets are covered under warranty policy for a period of 12 months in the 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

On generating sets up to 650KVA, the base frame Fuel System

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

**Cooling Radiator** Radiator and cooling fan, complete with safety guards,

designed to cool the engines at high ambient

temperatures

**Exhaust System** Heavy duty industrial exhaust silencer

> Silencer noise reduction level: 22 [dB] Maximum allowable back pressure: 10 (kPa)

**Documentation** Operation & Maintenance manual, circuit wiring

diagrams and commissioning / fault finding instruction

leaflets are accompanied with the generator

Mounting Arrangement Base Frame:

The complete generating set is mounted as a whole in a

heavy duty fabricated steel base frame.

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 base frame 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

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

All mild steel components are fully degreased and painted

with powder coated paint to ensure maximum scuff

resistance and durability

**Factory Tests:** 

**Equipment Finishing:** 

