

### SPECTRO ELECTRICAL EQUIPMENT CO.





Generator Set Data Sheet

MPG30KVA

PK@50Hz30KVA/24KW





#### Main Features



DIESEL GENERATING



**PERKINS** 1103A-33G



400/230V. 380/220V



3 phase 50 Hz





**3CYLINDERS** 



8.3 LITRE



10.2 LITRE

Standby Power: 33 KVA - 26.4 KW

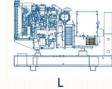
### Open Skid

Length (L) Height (H) Width (W) Weight

**Daily Tank** 

180 cm 130 cm 70 cm 750 kg 110 L

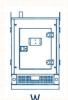


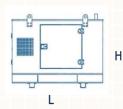


Prime Power: 30KVA - 24 KW

#### **Sound Proof**

Length (L) 225 cm Height (H) 132 cm Width (W) 110 cm Weight 1400 kg **Daily Tank** 120 L





Acoustic pressure level @3m

75 dBA

### ENGINE: PERKINS 1103A-33G

Engine power output **Cooling System** Displacement / Capacity

No. of cylinders Cylinder Arrangement

**Induction System Bore and Stroke** Cycle

**Combustion System Compression Ratio** Rotation

Frequency and Engine Speed

28 kWm-37hp Water Cooled

3.3 Liter

Vertical In line Naturally Aspirated 105 x 127 mm

4 stroke Direct Injection 19.25:1 nominal

Anti-clockwise, (viewed on flywheel)

50Hz & 1500rpm

Starting voltage

12V

Governor Mechanical Oil capacity 8.3 Liter Coolant capacity 10.2 Liter 12 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 7.2 L/hr. Fuel consumption at 75% load 5.61 L/hr. 4.06 L/hr. Fuel consumption at 50% load





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**AVR Model** 

MPG 30KVA

PK@50Hz 30kVA/24 kW

Powered by SPerkins SOMER

R120

±1%



## **ALTERNATOR: LEROY SOMER**

Rating Model TAL042C 30KVA No. of bearing Insulation class H 6 Wires

SHUNT **Total Harmonic Content Excitation System** At no load<2%

-no load<5% **Ingress Protection** IP23

Winding Pitch 2/3(Wdg 3) Over-speed

**Voltage Regulation** 2250 mn<sup>-1</sup> **Circuit Breaker Capacity** 

MCB 50Amps

STANDARD CANOPY

Sound Level 75 dBA @ 3 meters in free space

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

> enforcement and bolted on the body. 3 service doors with stainless steel door locks.

Stainless steel heavy duty door hinges.

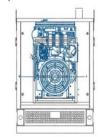
Black steel canopy body - 2mm and 3mm treated with greasing phosphate and anticorrosion treatment with

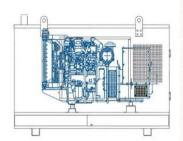
electro static power coating.

Connection Flexible

Rockwool with perforated sheets Sound isolation

Muffler with rain cap Muffler





# CONTROL (MONITORING) SYSTEM: DEEP SEA

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 pol	cy for a period of 12 months in line with the manufacturers' warranty policy
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**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

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

**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

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:**