

SPECTRO ELECTRICAL EQUIPMENT CO.





Generator Set Data Sheet

MPG13KVA

PK@50Hz13KVA/10.4KW

Powered by SPerkins LEROY*



Main Features





PERKINS +03A-15G1



400/230V, 380/220V



3 phase 50 Hz





3CYLINDERS



6 LITRE



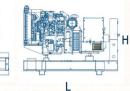
6 LITRE

Standby Power: 15KVA - 11.4KW

Open Skid

Length (L) 150 cm 110 cm Height (H) Width (W) 50 cm Weight 375 kg **Daily Tank** 50 L



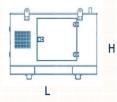


Prime Power: 13KVA - 10.4 KW

Sound Proof

198 cm Length (L) Height (H) 122 cm Width (W) 78 cm Weight 850 kg **Daily Tank** 45 L





Acoustic pressure level @3m

75 dBA

ENGINE: PERKINS 403A-15G1

Engine power output 12 kWm-16hp **Cooling System** Water Cooled Displacement / Capacity 1.496 Liter No. of cylinders

Vertical In line Cylinder Arrangement **Induction System** Naturally Aspirated **Bore and Stroke** 84 x 90 mm Cycle 4 stroke **Combustion System** Indirect Injection

Compression Ratio 22.5:1 nominal

Rotation Anti-clockwise, viewed on flywheel

Frequency and Engine Speed 50Hz & 1500rpm Starting voltage 12V

Governor Mechanical Oil capacity Coolant capacity 6 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 3.7 L/hr. Fuel consumption at 75% load 2.8 L/hr. Fuel consumption at 50% load 2.0 L/hr.









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±1%



ALTERNATOR: LEROY SOMER

Total Harmonic Content

Model Rating 12.5KVA TAL040C Insulation class No. of bearing Н

Wires 6 At no load<3.5% SHUNT **Excitation System**

Linear load<5%

Ingress Protection **AVR Model** R120 IP23

Winding Pitch 2/3(Wdg 3)

2250 mn⁻¹ Circuit Breaker Capacity MCB 25Amps

STANDARD CANOPY

Over-speed

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

Voltage Regulation

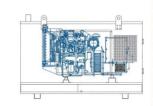
electro static power coating.

Connection Flexible

Sound isolation Rockwool with perforated sheets

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.

indications

Metering and Alarm

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

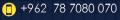
Battery volts

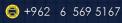
Charge fail

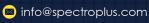
Low DC voltage

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

Factory Tests:

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

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 **Equipment Finishing:**

with powder coated paint to ensure maximum scuff

resistance and durability

Meico Energy Generators are assembled in facilities certified to ISO 9001



