





Generator Set Data Sheet

MPG2000KVA

PK@50Hz 2000KVA/1600KW Powered by Perkins SOMER





Main Features





PERKINS 4016-61TRG2



400/230V, 380/220V



3 phase 50 Hz





16 CYLINDERS



215 LITRE

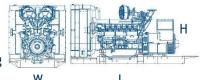


252 LITRE

Standby Power: 2250 KVA - 1800 KW

Open Skid

Length (L) 590 cm Height (H) 355 cm 280 cm Width (W) Weight 15500 kg **Daily Tank** N/A



Prime Power: 2000KVA - 1600KW

Sound Proof

110 cm Length (L) Height (H) 375 cm Width (W) 330 cm 26000 kg Weight N/A **Daily Tank**



Acoustic pressure level @3m

85 dBA

ENGINE: PERKINS 4016-61TRG2

Engine power output 1684 kWm-2257 hp

Cooling System Water Displacement / Capacity 61.123 Liter No. of cylinders 16 **Cylinder Arrangement** 60° Vee **Induction System** Turbocharged **Bore and Stroke** 160 x 190 mm

Cycle 4 stroke, compression ignition

Combustion System Direct Injection **Compression Ratio** 13.6:1 nominal

Rotation Anti-clockwise, viewed on flywheel end

Frequency and Engine Speed 50Hz & 1500rpm Starting voltage 24V Governor Electronic Oil capacity 215 Liter Coolant capacity 252 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)

442 L/hr. Fuel consumption at 100% load Fuel consumption at 75% load 318 L/hr. Fuel consumption at 50% load 216 L/hr.



MPG 2000KVA PK@50Hz 2000kVA/1600 kW Powered by SPerkins





ALTERNATOR: LEROY SOMER

Rating	2000KVA	Model	LSA51.2M60
No. of bearing	1	Insulation class	Н
		Wires	6
Total Harmonic Content	<3.5%	Excitation System	AREP
Ingress Protection	IP23	AVR Model	R449
Winding Pitch	2/3(n° 6S)		
Over-speed	2250 mn ⁻¹	Voltage Regulation	± 0.5%
Circuit Breaker Capacity	ACB 3200Amps		

STANDARD CANOPY

Sound Level 85 dBA @ 3 meters in free space

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

enforcement and bolted on the body.

8 service doors with stainless steel door locks.

Stainless steel heavy duty door hinges.

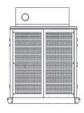
Black steel canopy body - 2mm and 3mm treated with greasing phosphate and anticorrosion treatment with

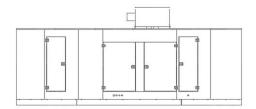
electro static power coating.

Connection Flexible

Rockwool with perforated sheets Sound isolation

Muffler 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)



MPG 2000KVA PK@50Hz 2000kVA/1600 kW Powered by SPerkins





OPTIONAL EQUIPMENTS

ATS (Automatic Transfer Switch) **Alternator Anti-condensation Heater**

Water Jacket Heater Load Bank

Electrical Fuel Level Sensor Battery Charger Fuel Level Protection Fuel Water Separator

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 Cooling Radiator Exhaust 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 Radiator and cooling fan, complete with safety guards, designed to cool the engines at high ambient temperatures Heavy duty industrial exhaust silencer Silencer noise reduction level: 22 (dB) Maximum allowable back pressure: 10 (kPa)	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		
Documentation	Operation & Maintenance manual, circuit wiring diagrams and commissioning / fault finding instruction leaflets are accompanied with the generator	Factory Tests: Equipment Finishing:	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		
Assembled in facilities certified to ISO 9001					

OTS - Generators 3307, 1st Floor, Tayouneh, Facing Ghobeiry Police Station Ghobeiry -Lebanon Phone: +961-1-271010, Whatsapp: +96181432901 info@ots-int.com - www.ots-int.com