Adpower
Generating Sets

PM250

3 PHASE OUTPUTS			
GENERATOR SET MODEL	RATING	50HZ	
		380-415 V, 1500 rpm	
		KVA	KW
PM-250	PRIME	250	200
	STAND-BY	275	220

POWERED BY: **Perkins** | **LEROY SOMER**

* Ratings at 0.8 pf - Generator designed to operate in ambient temperatures up to 55 ºC
* Generating Set photo is for reference only.

ALTERNATOR DATA

Make	Leroy Somer
Model	TAL 046D
No. of bearings	1
Insulation Class	H
Total Harmonic Content	<3.5%
Wires	6
Ingress Protection	IP23
Excitation System	SHUNT
Winding Pitch	2/3 (nº6)
AVR Model	R150
Overspeed	2250 mn^{-1}
Voltage Regulation	±1%

CONTROL PANEL

Make	Deepsea

This an Auto Start Control Module for single genset 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
• Underspeed, Overspeed
• Generator volts (L-L, L-N)
• Generator current
• Engine oil pressure
• Engine coolant temperature
• Hours run counter
• Battery volts
• Fail to start/stop
• Emergency stop
• Failed to reach loading voltage/frequency
• Charge fail

ENGINE / TECHNICAL DATA

Engine Make	Perkins	
Engine Model	1206A-E70TTAG3	
Governing Type	Electronic	
Cylinder Arrangement	Vertical in line	
Number of Cylinders	6	
Bore and Stroke	105 x 135	
Displacement/Cubic Capacity liters	7.01	
Induction System	Series Turbocharged, air to air charge cooled	
Cycle	4 stroke	
Combustion System	Direct Injection	
Compression Ratio	15.8:1	
Rotation	Anti-clockwise	
Cooling System	Water-cooled	
Frequency and Engine Speed	50Hz & 1500rpm	
	Prime	**Standby**
Gross Engine Power kW	226.2	248.6
FUEL CONSUMPTION (L/hr) 50%	28.1	-
75%	41.5	-
100%	56.9	64.5
Total Lubrication System Capacity [L]	16	16
Total Coolant Capacity (with radiator) [L]	25	25
Exhaust Temperature ºC	515.8	511
Radiator Cooling Air Flow (Min): m³/sec	4.42	4.42
Combustion Air Flow: m³/min	13.5	15.7
Exhaust Gas Flow: m³/min	30.9	33.66
Fuel Tank Capacity: litres	460	460

Dimension and Weight

DIMENSION	OPEN	SILENT
Length (L)	2900 mm	3900 mm
Width (W)	990 mm	1430 mm
Height (H)	1830 mm	2020 mm
Net Weight	2092 kg	2982 kg

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RATING DEFINITIONS:

Prime Power - These ratings are applicable for supplying continuous power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Standby Power - These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these rating. When used at standby Rating the alternator will be peak continuous rated (according to ISO3046)

STANDARD SPECIFICATIONS

1. **ENGINE**
   Perkins heavy duty diesel engine.
   1.1 GOVERNOR
   Electronic, compliance with ISO8528, Class G2.

2. **COOLING RADIATOR**
   Radiator and cooling fan complete with protection guards, designed to cool the engine in ambient temperatures up to 55° C. The radiator is mounted on the base frame to avoid vibrations coming from the engine.

3. **FILTRATION SYSTEM**
   Cartridge type air filter with security element. Cartridge fuel filter and full lube oil filter. All filters have replaceable elements.

4. **EXHAUST SYSTEM**
   Heavy-duty industrial silencer.

5. **ELECTRICAL SYSTEM**
   12 Volt system with battery charging alternator, Starter motor, High capacity maintenance free lead acid battery, battery rack mounted on the generating set base frame, and heavy duty interconnecting cables with terminations.

6. **ALTERNATOR**
   Screen protected and drip-proof, self-exciting, self-regulating brush-less alternator. Four poles, STAR winding connection, suitable for tropical, humid and saline climates. H class insulation.

7. **AUTOMATIC VOLTAGE REGULATOR (AVR)**
   Static electronic design voltage regulator. Steady voltage precision within + 1 % from no load to full load including cold and hot variations, at any Power factor between 0.8 and unity.

8. **MOTOR STARTING**
   An overload capacity equivalent to between 160% to 300% (depending on alternator frame size) of full load impedance at zero power factor can be sustained for 10 seconds.

9. **MOUNTING ARRANGEMENT**
   9.1 BASE FRAME
   The complete generating set is mounted on heavy duty steel fabricated base frame which is anti rust coated.
   9.2 COUPLING
   Engine and alternator are directly coupled by means of SAE flange. The engine fly wheel is flexibly coupled to the alternator rotor.
   9.3 ANTI VIBRATION MOUNTING PADS
   Anti vibration pads are fitted between engine-alternator base frame ensuring complete vibration isolation of rotating assemblies.

10. **FUEL SYSTEM**
    On Generating Sets up to 700 KVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

11. **DOCUMENTATION**
    A full set of operation and maintenance manual are provided.

12. **FACTORY TESTS**
    Generating set is subject to a strict load test before delivery. A test certificate can be provided as optional.

13. **QUALITY STANDARDS**
    Generating set meets the following standards ISO 8528, IEC 34.1, CEI 2.3, VDE 0530, BS 4999-5000, NF51-100. Perkins is fully accredited ISO 9001 company.

14. **WARRANTY**
    Generating set is guaranteed for a period of 12 months from date of commissioning or18 months from date of shipment which ever occurs earlier. (check warranty statement for more details, as it may vary for different countries)

    In line with our policy of continuous product development, we reserve right to change specification without notice

AVAILABLE OPTIONS & ACCESSORIES

We offer a range of optional features and accessories to tailor our generating sets to meet your needs.

OPTIONS
- Generator Set control and synchronizing panels
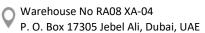- Additional Protection alarms and shutdowns
- Water fuel separator
- Water jacket heater
- Battery charger

ACCESSORIES
- Genuine spare parts
- Fuel Tanks
- Manual and Automatic Transfer Switches

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