

# MOSA GE 90 PSX



## Product description:

MOSA GE90 PSX 72 KW generating set

MOSA GE90 PSX three-phase 72 KW generator set with Perkins diesel engine. The MOSA GE90 PSX generator set is equipped with electric start. The alternator of the MOSA GE90 PSX generator set is synchronous, three-phase, self-excited, self-regulated, brushless with class H insulation with AVR voltage regulator.

This MOSA is compact and convenient to maneuver and transport thanks to its compact size, with a weight of 1540 kg in addition to its practical pierceable base. The MOSA GE90 PSX genset with 230-liter tank has a fuel consumption of 14 liters/hour at 75% load for a 16-hour autonomy.

## Technical specifications:

Three-phase output Stand-by (LTP): 90 kVA (72 kW) / 400V / 130A

Three-phase output PRP: 82 kVA (65.6 kW) / 400 V / 118.3 A

Frequency 50 Hz

Cos  $\phi$ : 0.8

## ENGINE TECHNICAL DATA

Model: PERKINS 1104A-44TG2

Cylinders / Displacement: 4 / 4400 cm<sup>3</sup> (4.4 lt.)

Bore / Stroke: 105 / 127 (mm)

Compression ratio: 17.25 : 1

Net Stand-by Output: 79.1 kWm (107.6 hp)

Net PRP Output: 71.9 kWm (97.8 hp)

BMEP Effective Average Pressure: 1467 kPa - 1335 kPa

RPM Regulator: Mechanical

110 % (Stand-by Power): 218 g/kWh - 20.5 lt./h

100 % PRP: 218 g/kWh - 18.7 lt. /h

75 % PRP: 218 g/kWh - 14 lt./h  
50 % PRP: 226 g/kWh - 9.7 lt./h  
Total capacity - motor only: 13 lt - 7 lt.  
Fan air flow: 89 m<sup>3</sup>/min.  
Total oil capacity: 8 lt  
Oil capacity in sump: 7 lt ÷ 5.5 lt  
Oil consumption at full load: Max. exhaust gas flow rate: 13.3 m<sup>3</sup>/min.  
Max. exhaust gas temperature: 580 °C  
Max. back pressure: 10 kPa (0.10 bar)  
Electrical system: 12 Vdc  
Starter motor power: 3 kW  
Battery charging alternator capacity: 65 A  
Cold start: - 10°C  
With cold start device: - 25 °C  
Air filter: Dry  
Combustion air flow: 5.14 m<sup>3</sup>/min  
From exhaust gas: 59 kW - 3358 Btu/min  
From water and oil: 51 kW - 2902 Btu/min  
Fired to the environment: 14 kW - 797 Btu/min

#### TECHNICAL DATA ALTERNATOR

Continuous power: 85 kVA  
Standby power: 94 kVA  
Three-phase voltage: 380 - 415 Vac  
Frequency: 50 Hz  
Cos φ: 0.8  
A.V.R. model. : MARK V  
Voltage regulation accuracy: ± 0.5 %  
Sustained short-circuit current: 370 A  
Transient Cdt (100% of load): Response time: Yield at 100% load 91 %: (400V - Cos φ 0.8)  
Isolation: Class H  
Connection - Terminals: Star - No. 12  
Electromagnetic compatibility: EN 55011  
Harmonic distortion - THD: Telephone interference - THF: Direct synchronous - Xd: 285 %  
Direct transitory - X'd: 22.5 %  
Direct subtransitory - X'd: 10.8 %  
Synchronous quad. - Xq: 160 %  
Subtrans. in quadrature - X'q: 12 %  
Of reverse sequence - X2: 11.4 %  
Of zero sequence - X0: 2.5 %  
Transitory - T'd: 0.071 sec  
Subtransitory - T'd: 0.005sec  
Unidirectional - T'do: 0.82sec  
Unidirectional - Ta / Armatures - Ta: 0.005sec  
Short-circuit ratio Kcc: 0.38

Protection class: IP 23

Cooling air flow rate: 0.31 m<sup>3</sup>/sec.

Coupling | Bearings: Direct SAE 3 -11 ½ - No. 1

#### GENERAL SPECIFICATIONS

Tank capacity: 230 lt.

Autonomy (75% of PRP): 16 h

Acoustic power measured LwA: 92 dB(A) (67 dB(A) @ 7m)

Acoustic power guaranteed LwA: 94 dB(A) (69 dB(A) @ 7m)

Performance class: G2

Length: 2630 mm

Width: 1130 mm

Height: 1750 mm

Weight: 1540 Kg

MOSA GE90 PSX - Perkins diesel engine electric start - Three-phase alternator - Three-phase power 82 kVA (65.6 kW)

#### Features:

- Electronic AVR voltage regulation
- Sealed crankcase able to contain any leakage of the liquids present in the engine avoiding environmental pollution
- Oil extraction pump
- Fuel pre-filter with water decanter
- Large access doors to allow easy maintenance (replacement of air, oil, fuel filters)
- Central lifting hook
- Control panel with digital control unit in Automatic or Manual version
- Ready for a wide range of equipment
- Supersilenced
- Complies with EC directives for noise and safety

If you are looking for another product like the generator set MOSA GE90 PSX then you can see on our catalog other terrestrial generators.

Images and technical data are not binding.

#### Product features:

Phase: Single phase / Three phase

Maximum power three phase (KW): 72

Continuous power three phase (KW): 65

Maximum power three phase (KVA): 90

Continuous power three phase (KVA): 82

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Fuel: Diesel  
Frequency (Hz): 50  
Voltage (V): 230 / 400  
Engine: PERKINS 1104A-44TG2, 4 stroke turbo-aftercooler  
Emissions Regulations: Stationary Use  
Engine rpm (rpm): 1500  
Speed governor: Mechanical  
Starting system: Electric  
Engine capacity (cm<sup>3</sup>): 4400  
Number cylinders: 4  
Oil capacity (L): 8  
Cooling: Water  
Inyección : Direct  
Alternator: Sincrono trifase, autoeccitato, autoregolato, senza spazzole  
Bore x stroke (mm): 105 x 127  
Fuel tank capacity (L): 230  
Consumption (L/h): 14 at 75% of the load  
Running time (h): 16 at 75% of the load  
Acoustic power: 94 dB(A)  
Acoustic pressure: 69 dB(A) at 7 m  
Length (mm): 2630  
Width (mm): 1130  
Height (mm): 1750  
Dry weight (Kg): 1540  
Silenced: Yes  
Super silenced: Yes  
Product type: Generator  
ATS Switch device : Optional  
Voltage regulator: AVR  
Engine manufacturer: Perkins