



# MOSA GE 120 PSX Three-phase generating set 114 kVA AVR

## Product description:

MOSA GE120 PSX generator set 91,2 KW

MOSA GE120 PSX three-phase 91,2 KW generator set with Perkins diesel engine. The MOSA GE120 PSX generator set is equipped with electric start. The alternator of the MOSA GE120 PSX generator set is synchronous, three-phase, self-excited, self-regulated, brushless with class H insulation with AVR voltage regulator.

This MOSA GE120 PSX is compact and convenient to maneuver and transport thanks to its compact size, weighing 1720 kg as well as its practical drillable base. The MOSA GE120 PSX generator set with 230-liter fuel tank has a fuel consumption of 17.1 liters/hour at 75% load for a range of 13 hours.

## Technical specifications:

Three-phase output Stand-by (LTP): 114 kVA (91.2 kW) / 400 V / 164.5 A

Three-phase output PRP: 104 kVA (83.2 kW) / 400 V / 150 A

Frequency: 50 Hz

Cos φ: 0.8

## ENGINE TECHNICAL DATA

Model: PERKINS 1104C-44TAG2

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

Bore / Stroke: 105 / 127 (mm)

Compression Ratio: 18.3 : 1

Net Standby Output: 99.5 kW (135 hp)

Net PRP Output: 90.1 kW (122 hp)

BMEP Effective Average Pressure: 1873 kPa - 1702 kPa

RPM Controller: Electronic

110 % (Stand-by Power): 205 g/kWh - 24.9 lt./h

100 % PRP: 205 g/kWh - 22.6 lt./h





75 % PRP: 207 g/kWh - 17.1 lt./h  
50 % PRP: 204 g/kWh - 11.2 lt./h  
Total capacity - motor only: 12. 6 lt - 7 lt.  
Fan air flow: 165.6 m<sup>3</sup>/min.  
Sump oil capacity: 8 lt ÷ 5.5 lt  
Full load oil consumption: Max. exhaust gas flow: 16.3 m<sup>3</sup>/min.  
Max. exhaust gas temperature: 543 °C  
Max. back pressure: 15 kPa (0. 15 bar)  
Electrical system: 12 Vdc  
Starter motor power: 3.2 kW  
Battery charging alternator capacity: 65 A  
Cold start: - 10 °C  
With cold start device: - 25 °C  
Air filter: Dry  
Combustion air flow rate. 6.27 m<sup>3</sup>/min  
From exhaust: 78.9 kW - 4485 Btu/min.  
From water and oil: 50.7 kW - 2281 Btu/min.  
Fired to ambient: 7.5 kW - 424 Btu/min.  
Supercharger cooling: 10.9 kW - 621 Btu/min.

#### TECHNICAL DATA ALTERNATOR

Continuous power: 105 kVA  
Standby power: 116 kVA  
Three-phase voltage: 380 - 415 Vac  
Frequency: 50 Hz  
Cos  $\phi$ : 0.8  
A.V.R. model. : MARK V  
Voltage regulation accuracy:  $\pm$  0.5 %  
Sustained short-circuit current: 3 In  
Transient Cdt (100% of load): Response time: Yield at 100% load: 91.8 % (400V - Cos  $\phi$  0. 8)  
Isolation: Class H  
Connection - Terminals: Star - No. 12  
Electromagnetic Compatibility: EN 55011  
Harmonic Distortion - THD: Telephone Interference - THF: Direct Synchronous - Xd: 275 %  
Direct Transitory - X'd: 21 %  
Direct Subtransitory - X "d: 9. 9 %  
Synchronous in quad. - Xq: 150 %  
Subtrans. in quadrature - X'q: 10.9 %  
Of reverse sequence - X2: 10.4 %  
Of zero sequence - X0: 2.2 %  
Transitory - T'd: 0.078 sec  
Subtransitory - T'd: 0.006sec  
Avoid - T'do: 0. 95 sec  
Unidirectional - Ta / Armatures - Ta: 0.006 sec  
Short-circuit ratio Kcc: 0.4





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.

Run time (75% of PRP): 13.5 h

Measured acoustic power LwA: 92 dB(A) (67 dB(A) @ 7m)

Guaranteed acoustic power LwA: 94 dB(A) (69 dB(A) @ 7m)

Performance class: G3

Length: 2630 mm

Width: 1130 mm

Height: 1750 mm

Weight: 1720 kg

MOSA - Perkins diesel engine electric start - Three-phase alternator - Three-phase power 104 kVA (83.2 kW)

If you are looking for another product like the Generator Set MOSA GE120 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): 91.2

Continuous power three phase (KW): 83.2

Maximum power three phase (KVA): 114

Continuous power three phase (KVA): 104

Fuel: Diesel

Frequency (Hz): 50

Voltage (V): 230 / 400

Engine: PERKINS 1104C-44TAG2, 4 stroke turbo-aftercooler

Emissions Regulations: Stationary Use

Engine rpm (rpm): 1500

Speed governor: Electronic

Starting system: Electric

Engine capacity (cm<sup>3</sup>): 4400

Number cylinders: 4

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): 17.1 at 75% of the load  
Running time (h): 13.5 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): 1720  
Silenced: Yes  
Super silenced: Yes  
Product type: Generator  
ATS Switch device : Optional  
Voltage regulator: AVR  
Engine manufacturer: Perkins

