



# KMGVP450 GENSET

Generating Set Powered By **VOLVO PENTA**

**STAMFORD® LEROY-SOMER™**



Image for illustration purposes only

## Output Ratings

Speed, Frequency/Volt	Prime Power	Standby Power
1500rpm, 50 Hz /400V	320KWe / 400KVA	360KWe / 450KVA

## Engine Technical Data

No. of Cylinders / Alignment	6 In Line
Cycle	4 Stroke
Aspiration	Turbocharged
Injection	Electronic
Bore, mm	131
Stroke, mm	158
Displacement, l	12.78
Compression Ratio	18.1:1
Starting	24V Electric
Alternators, Amps	24V/80A

## Genset Specification

Engine Make & Model	Volvo Penta TAD1344GE -B					
Origin	SWEDEN					
Alternator Type	S4L1D-F41/TAL0473A					
Control Panel	Deep Sea - 7310 MKII					
Circuit Breaker Type	3Pole MCCB					
<b>Tropical Cooling System</b>						
Fully Electronic with Volvo Penta EMS2						
<b>Emission Compliant</b>						
CANBUS SAEJ1939 Interface						
<b>Fuel System (prime)</b>	<b>50%</b>	<b>75%</b>	<b>100%</b>			
1500rpm, 50 Hz (L/hr)	42.4	62.3	82.2			

## International Standards

Engine confirm to ISO 9001 2000, ISO 14001, ISO 10054, ISO 3046, BS 5514, DIN 6271. Alternator confirm to ISO 9001, ISO 14001, BS EN 60034, BS 5000, VDE 0530, NEMA MG1-32, IEC34 CSA C22.2-100, AS 1359, BS 6861 1, B En 61000-6-2:2001



## RATING GUIDELINES

**PRIME POWER** rating corresponds to ISO Standard Power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours instead of commercially purchased power. A 10 % overload capability for governing purpose is available for this rating.

**MAXIMUM STANDBY POWER** rating corresponds to ISO Standard Fuel Stop Power. It is applicable for supplying standby electrical power at variable load in areas with well established electrical networks in the event of normal utility power failure. No overload capability is available for this rating.  $1 \text{ hp} = 1 \text{ kW} \times 1.36$

## Alternator Technical Data

No. of Bearings	Single Bearing
Insulation System	Class H
Excitation	Self Excited
Voltage Regulator	AS440/R150
Protection	IP23
Temperature Rise, °C	Prime 125/40 Standby 163/27
Regulation	±1.0% - ±0.8%
No. of Phases	3
No. of Poles	4

## Dimensions (m) & Weights (kg)

	L	W	H	Weight	Tank Capacity(L)
Open	3.24	1.20	1.76	3230	380
Enclosed	4.51	1.45	2.35	4780	500

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Performances	1500rpm
Alternator Efficiency	93.4%
<b>Engine Power</b>	
Prime Power, KW/hp	354(481)
Standby Power, KW/hp	389(529)
<b>Alternator</b>	
Prime Power, KWe	320

Control Panel Readings
• AC volts, AC currents, DC volts, frequency, rpm, hour counter, power factor.
• Low oil pressure, high water temperature, boost pressure and temperature, KW, KWh, KVA, KVAR, fuel consumption, relative load
• Oil pressure, water temperature, low oil level, high oil temperature
• DC alternator failure, over speed, over crank (Fail to start), over under voltage, over under current, any sensor failure
• Low coolant level - Configurable inputs&output
• Upgradable for GSM network connection, Signal SMS messages.

Lubrication System	1500rpm
Oil Consumption (l/hr)	0.04
<b>Oil Sump Capacity, l</b>	30
Oil System Capacity Include Filters, l	36

Optional Equipment
• <b>Engine</b>
- Coolant heater
- Oversize batteries
- Extra fuel pre-filter water separator
- Battery disconnector switch
• <b>Alternator</b>
- Permanent magnet generator (PMG)
- Upgrade to 3 phase sensing AVR
- Quadrature droop kit
- Anti-condensation heater
- Air inlet filter
• <b>General</b>
- Upgrade to modular controller for paralleling
- Upgrade to 4 pole circuit breaker
- Battery charger
- Automatic transfer switch
- Fuel level switch High / Low for alarm and control
- Fuel transfer pump Automatic / Manual
- Residential grade silencer
- Weather protective and acoustic enclosure.

Cooling System	1500rpm
Heat Radiation from Engine and Alternator, Power KW (Standby)	15
<b>Heat Rejection to Coolant and Lube Oil at Standby Power, KW</b>	155
Radiator Cooling Air Flow, m <sup>3</sup> /s	6.5
<b>Coolant Capacity, l</b>	44

Spare Parts Kit (Optional)	Genuine - Volvo Penta
Oil filter, full flow	(2)
Oil filter, bypass	(1)
Fuel filter water separator	(1)
Fuel filter	(1)
Air filter	(1)
Fan belt set	(1)
Coolant filter	(1)
Alternator belt set	(1)

Intake & Exhaust System	1500rpm
Air Flow Combustion at Standby Power, m <sup>3</sup> /min(cfm)	28(989)
<b>Heat Rejection Exhaust at Standby Power, KW</b>	266
Exhaust Gas Temperature at Standby °C	465
<b>Max Allowable Back Pressure in Exhaust Line, Kpa</b>	10
Exhaust Gas Flow at Standby Power, m <sup>3</sup> /min(cfm)	67.5(2384)

## General Information

### Documentation

Engine instruction book-English  
Alternator manual- English  
Wiring diagram

### Warranty

One year with unlimited hours against all defects in material / or workmanship, subject to the terms and conditions of the Manufacturer's warranty

Accessories	
Oil Drain Pump	Standard Silencer
Stainless Steel Flexible	Anti-Vibration Pads
Genuine Oil (Volvo Penta)	Genuine Coolant 'Ready Mix'

