



KMGVP650 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	480KWe /600KVA	524KWe / 655KVA

Genset Specification

Engine Make & Model	Volvo Penta TAD1642GE -B
Origin	SWEDEN
Alternator Type	S5LID-E4I/TAL0473E
Control Panel	Deep Sea - 7310 MKII
Circuit Breaker Type	3Pole MCCB

Tropical Cooling System

Fully Electronic with Volvo Penta EMS 2

Emission Compliant

CANBUS SAEJ1939 Interface

Fuel System (prime)	50%	75%	100%
1500rpm, 50 Hz (L/hr)	59.9	88.9	116.7

International Standards

Engine conform to ISO 9001 2000, ISO 14001, ISO 10054, ISO 3046, BS 5514, DIN 6271. Alternator conform to ISO 9001, ISO 14001, BS EN 60034, BS 5000, VDE 0530, NEMA MG1-32, IEC34 CSA C22.2-100, AS 1359, BS 6861 I, 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. A10 % 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 hp = 1 kW x 1.36**

Engine Technical Data

No. of Cylinders / Alignment	6 In Line
Cycle	4 Stroke
Aspiration	Turbocharged
Injection	Electronic
Bore, mm	144
Stroke, mm	165
Displacement, l	16.12
Compression Ratio	16.5:1
Starting	24V Electric
Alternators, Amps	24V/80A

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	3.48	1.27	1.95	3950	380
Enclosed	4.75	1.44	2.50	5845	540

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Performances 1500rpm	
Alternator Efficiency	94.9%
Engine Power	
Prime Power, KWm(hp)	505(687)
Standby Power, KWm(hp)	556(756)
Alternator	
Prime Power, KWe	488

Lubrication System 1500rpm	
Oil Consumption (l/hr)	0.11
Oil Sump Capacity, l	42
Oil System Capacity Include Filters, l	48

Cooling System 1500rpm	
Heat Radiation from Engine and Alternator, Power KW (Standby)	20
Heat Rejection to Coolant and Lube Oil at Standby Power, KW	218
Radiator Cooling Air Flow, m³/s	9.1
Coolant Capacity, l	61

Intake & Exhaust System 1500rpm	
Air Flow Combustion at Standby Power, m³/min(cfm)	40.6(1434)
Heat Rejection Exhaust at Standby Power, KW	426
Exhaust Gas Temperature at Standby °C	494
Max Allowable Back Pressure in Exhaust Line, Kpa	10
Exhaust Gas Flow at Standby Power, m³/min(cfm)	100.7(3556)

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

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.

Optional Equipment
• Engine -Coolant heater -Oversize batteries -Extra fuel pre-filter water separator -Battery disconnect switch • Alternator -Permanent magnet generator (PMG) -Upgrade to 3 phase sensing AVR -Qadrature droop kit -Anti-condensation heater -Air inlet filter • General -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.

Spare Parts Kit (Optional)	Genuine - Volvo Penta
Oil filter , full fl w	(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)

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

