



KGVP590 GENSET

Generating Set Powered By **VOLVO PENTA** **STAMFORD**



Image for illustration purposes only

Output Ratings

Generating Set Model	Prime Power	Standby Power
1500rpm, 50 Hz /400V 473KWe / 591KVA	521KWe / 651KVA	
1800rpm, 60 Hz /440V 500KWe / 625KVA	550KWe / 687KVA	

Genset Specifications

Engine Make & Model	Volvo Penta TAD1642GE
Origin	SWEDEN
Alternator Type	Stamford HCI544E
Control Panel	Deap Sea - 7310
Circuit Breaker Type	3 Pole MCCB
Tropical Cooling System	55°C

Fully Electronic with Volvo Penta EMS 2

Emission Compliant

CANBUS SAEJ1939 Interface

Fuel System	50%	75%	100%
1500rpm, 50 Hz	59.28	88.47	120.36
1800rpm, 60Hz	64.60	95.95	132.36

*Prime Power (l/hr)

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 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

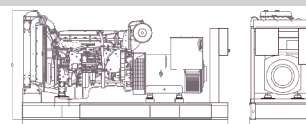
No. of Cylinders / Alignment	6 In Line
Cycle	4 Stroke
Aspiration	Turbocharged
Injection	Electronic
Bore, mm	144
Stroke, mm	165
Displacement, l	16.12
Compression Ratio	16.5:1
Starting	24V Electric
Alternators, Amps	24V/80A

Alternator Technical Data

No. of Bearings	Single Bearing
Insulation System	Class H
Excitation	Self Excited
Voltage Regulator	AS440
Protection	IP23
Temperature Rise, °C	125
Regulation	±1.0%
No. of Phases	3
No. of Poles	4

Dimensions & Weights

Length(m)	Width(m)	Height(m)	Weight(kg)	Tank Capacity(L)
3.65	1.13	1.95	3995	405



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Performances	1500rpm	1800rpm
Alternator Efficiency	94.9%	94.9%
Engine Power		
Prime Power, KWm(hp)	503(684)	532(724)
Standby Power, KWm(hp)	554(753)	585(796)
Alternator		
Prime Power, KWe	488	570

Lubrication System	1500rpm	1800rpm
Oil Consumption (l/hr)	0.11	0.12
Oil Sump Capacity, l	42	
Oil System Capacity Include Filters, l	48	

Cooling System	1500rpm	1800rpm
Heat Radiation from Engine and Alternator, Power KW (Standby)	20	24
Heat Rejection to Coolant and Lube Oil at Standby Power, KW	218	248
Radiator Cooling Air Flow, m³/s	-	-
Coolant Capacity, l	93	

Intake & Exhaust System	1500rpm	1800rpm
Air Flow Combustion at Standby Power, m³/min(cfm)	40.6(1434)	46.6(1646)
Heat Rejection Exhaust at Standby Power, KW	426	500
Exhaust Gas Temperature at Standby °C	494	512
Max Allowable Back Pressure in Exhaust Line, Kpa	10	10
Exhaust Gas Flow at Standby Power, m³/min(cfm)	100.7(3556)	117.6(4153)

Accessories	
Oil Drain Pump	Standard Silencer
Stainless Steel Flexible	Anti-Vibration Pads
Genuine Oil (Volvo Penta)	Fuel Tank Base Frame for 8hrs
Volvo Penta '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&outputs
- 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 filters
- **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 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)

General Information

- Documentation**
- Engine instruction book-English
 - Alternator manual- English
 - Wiring diagram

Warranty

One year or 1000 thousand hours whichever elapsed first against all defects in material / or workmanship, subject to the terms and conditions of the Manufacturer's warranty.

