# ORA







Image for illustration purposes only

### **Output Ratings**

Generating Set Model	Prime Power	Standby Power
1500rpm, 50 Hz /400V 3	329KWe / 412KVA	362KWe / 452KVA
1800rpm, 60 Hz /440V 3	865KWe / 456KVA	401KWe / 501KVA

### **Genset Specifications**

Engine Make & Model	Volvo Penta TAD1344GE
Origin	SWEDEN
Alternator Type	Stamford HCI444F
Control Panel	Deap Sea - 7310
Circuit Breaker Type	3 Pole MCCB
Tropical Cooling System	°55C

### Fully Electronic with Volvo Penta EMS2

### **Emission Compliant**

### **CANBUS SAEJ1939 Interface**

Fuel System	%50	%75	%100
1500rpm, 50 Hz	42.14	62.26	82.75
1800rpm, 60Hz	47.83	70	93.80

<sup>\*</sup>Prime Power (I/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 MG32-1, IEC34 CSA C-22.2100, AS 1359, BS 1 6861, B En -6-610002:2001



### **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 govering 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. I  $hp = 1 kW \times 1.36$ 

### **Engine Technical Data**

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

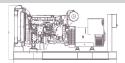
### Alternator Technical Data

Aiternator recinical 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)

3.35 1.13 1.80 3230 405





### GGV452 GENSET

### Generating Set Powered By PENTA

## **VOLVO**

### **STAMFORD**

Performances	1500rpm	1800rpm
Alternator Efficiency	%93.4	%93.4
Engine Power Prime Power, KWm(hp) Standby Power, KWm(hp)	481)354) 529)389)	533)392) 586)431)
<b>Alternator</b> Prime Power, KWe	320	384

Lubrication System	1500rpm	1800rpm
Oil Consumption (I/hr)	0.04	0.05
Oil Sump Capacity,I	30	
Oil System Capacity Include Filters, I	36	

Cooling System	1500rpm	1800rpm
Heat Radiation from Engine and Alternator, Power KW (Standby)		23
Heat Rejection to Coolant and Lube Oil at Standby Power, KW		180
Radiator Cooling Air Flow, m <sup>3</sup> /s	6.5	8.1
Coolant Capacity, I	44	

Intake & Exhaust System	1500rpm	1800rpm
Air Flow Combustion at Standby Power, m³/min(cfm)	989)28)	1165)33)
Heat Rejection Exhaust at Standby Power, KW	266	324
Exhaust Gas Temperature at Standby °C	465	490
Max Allowable Back Pressure in Exhaust Line, Kpa	10	10
Exhaust Gas Flow at Standby Power, m³/min(cfm)	2384)67.5)	2896)82)

### Accessories Ail Drain P

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 temparature, boost pressure and temperature, KW, KWh, KVA, KVAR, fuel consumption, relative load
- Oil pressure, water temparature, 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 disconnector 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**

0.1 0.1 0.1 0.1	(2)
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	(l)
Alternator belt set	(1)

### **General Information**

### **Documentation**

Engine instruction book-English Alternator manual- English Wiring diagram

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.







1rag-Erbil-60M str.

