

# PI 995P / PI 1097P

POWERED BY 🍪 Perkins

Industrial Generating Set PRIME<sup>(1)</sup> MODEL STANDBY<sup>(2)</sup> rpm / Hz VOLTAGE PI 995P / PI 1097P 1000.0 kVA / 800kWe 1800 / 60 480 / 277 1093 kVA / 874.4kWe Full rated power available upto 100 meter elevation at ambient of 27degC, for other temperature and altitude limits please consult application team **ENGINE SPECIFICATIONS FUEL SYSTEM** 898 kW<sub>m</sub> Rated Output (PRP)<sup>(1)</sup> Fuel Filter: Full-flow spin-on fuel oil filters Rated Output (ESP) (2) 1004 kW<sub>m</sub> Recommended Fuel Class A2 Diesel Perkins 4008TAG2A 249 L/hr (65.77 US gal/hr) Engine Make & Model Fuel Consumption Standby 224 L/hr (59.17 US gal/hr) No. of Cylinders 8 Vertical In-line Fuel Consumption 100% PRP Fuel Consumption 75% PRP Cycle 4 Strokes 162 L/hr (42.79 US gal/hr) Turbocharged & Air Fuel Consumption 50% PRP 108 L/hr (28.53US gal/hr) Aspiration to Air Charge Cooled **Cooling Method** EXHAUST SYSTEM Water Electronic Muffler Type **Residential Grade** Governing Type **Governing Class** G2 - ISO 8528 Part 1 Max. Back Pressure 3 kPa **Compression Ratio** 13.6:1 Exhaust Gas Flow 202 m<sup>3</sup>/min 505<sup>0</sup>C Displacement 30.56 L (1397.in<sup>3</sup>) Exhaust Gas Temperature BorexStroke ALTERNATOR SPECIFICATIONS 160x190 mm Battery and Charger Alternator 24 VDC, 40 Amp Rated Output (Prime)<sup>(1)</sup> 1300 kVA Rated Output (Standby)<sup>(2)</sup> 1400 kVA AIR SYSTEM Dry Element Alternator Make & Model Stamford S6L1D-E4 Air Filter Type 72 m<sup>3</sup>/min Number of Poles Combustion Air Flow (PRP) 4 Combustion Air Flow (ESP) 75 m<sup>3</sup>/min Number of Winding Leads 12 Radiator Air Flow 1350 m<sup>3</sup>/min Type of Bearing Single **COOLING SYSTEM** H/H Insulation Class / Temp Rise Total Coolant Capacity (L) 48 L (12.7 US gal) Efficiency @ Rated Voltage 95.3% Water Pump Type Ingress Protection Rating IP 23 Centrifugal Eng-Driven Radiator Fan Load 56 kW **Excitation System** Excited by P.M.G. Heat Radiation to Room (PRP) AVR Model Stamford - MX321 85 kW Heat Radiation to Room (ESP) 100 kW ALTERNATOR OPERATING DATA LUBRICATION SYSTEM 2250 r.p.m Overspeed **Oil Filter Type** Full-flow spin-on oil filters Voltage Regulation ± 0.5 % No load < 1.5%, **Total Oil Capacity** 153 L (40.4 US gal) Waveform distortion Linear load < 5% 153 L (40.4 US gal) **Radio Interface** EN 61000-6-2 & EN 61000-6-4 Oil Pan API CH4/CI4; SAE 15W-40 Oil Type Cooling Air Flow 1.69 m<sup>3</sup>/sec

<sup>(1)</sup> **PRIME POWER RATING (PRP):** PRP is defined as the maximum power which a Generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year. The permissible average power output over 24 hours shall not exceed 70% of PRP unless otherwise agreed by RIC engine manufacturer. An overload capability of 10% of 100% of the prime rated electrical power is permitted for emergency use for a period of 1 hour within 12 hours of operation

<sup>(2)</sup> **EMERGENCY STANDBY POWER RATING (ESP)**: ESP is defined as the maximum power available during a variable electrical power sequence, under the stated operation condition, for which a generating set is capable of delivering power in the event of a utility power outage or under test condition for up to 200 Hours of operation per year. The permissible average output over 24 hour of operation shall not exceed 70 % of the ESP power rating noting that no over load is permitted.





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Industrial Generating Set



CONTROLLER SPECIFICATIONS
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Controller Make & Model		DeepSea 6120MKIII	
Operation Mode		MRS / AMF (optional)	
Display	Graphic Back	-lit LCD (128x64) pixles	
Ingress Protection Rating		IP65	
Binary Inputs/Outputs		8 / 6	
Analog Inputs		4	
Measurement	Vac, A, Hz, kVA, kW, Vdc		
Event Log	Alarms log, Hrs log		
Communication	USB		

ENCLOSURE SPECIFICATIONS						
Enclosure Type	Acousti	c & Weather Proof				
Anticorrosive Protection						
Polyester Powder Coated Galvanized Sheet						
Ingress Protection Rating		IP22				
Lifting	ISO Standard Lifting					
Emergency	External E	mergency Push Button				
Container RAL Color		RAL 9001				
Baseframe RAL Color		RAL 9011				
Noise Pressure level @ 7m		86 dB(A)				

### GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	4810	2620	2395	2125	8600	8900
CLOSE	20 Feet ISO HC container		NA	10900	11000	

Note: The following dimensions are for preliminary guidance. For more detailed and accurate dimensions, please refer to the General Arrangement Drawing (GAD).

### STANDARD MECHANICAL FEATURES

Genset design provides a low noise level with an optimized performance of the ventilation and exhaust systems at 50 °C ambient temperature.

Robust structure design of Enclosure and Baseframe.

Hevy duty lifting lugs.

Multi doors for easy access & maintenance.

Ingress Protection Rating according to BS EN 60529.

Heavy Duty Baseframe with built-in tank & forklift pockets.

Industrial Grade Muffler with rain cap.

### **OPTIONAL FEATURES**

Advanced Controllers are available on request.

4 poles manual / Motorized Circuit breaker

Jacket water pre-heater

Static Battery Charger

Critical grade muffler

Fuel Filter / Water seperator Fuel Filter

Remote Annunciator

#### Application

Infrastructure, Industrial , Residential , Telecom, Defense , Mining , Aggriculture

### STANDARD ELECTRICAL FEATURES

An advance Control system is designed to provide a comperhensive protection and to monitor the parameters of generating set.

MCCB power circuit breaker.

Battery with charging alternator, cables, and tray.

Sealed harness & high resistant electrical connections.

Fast and accurate protection response.

Generating Set remote start function.

Numeric display with LED. Various languages capable.



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