

PI 995P / PI 1097P

POWERED BY 🍪 Perkins

Industrial Generating Set PRIME⁽¹⁾ MODEL STANDBY⁽²⁾ 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_m Rated Output (PRP)⁽¹⁾ Fuel Filter: Full-flow spin-on fuel oil filters Rated Output (ESP) (2) 1004 kW_m 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 m³/min 505⁰C Displacement 30.56 L (1397.in³) Exhaust Gas Temperature BorexStroke ALTERNATOR SPECIFICATIONS 160x190 mm Battery and Charger Alternator 24 VDC, 40 Amp Rated Output (Prime)⁽¹⁾ 1300 kVA Rated Output (Standby)⁽²⁾ 1400 kVA AIR SYSTEM Dry Element Alternator Make & Model Stamford S6L1D-E4 Air Filter Type 72 m³/min Number of Poles Combustion Air Flow (PRP) 4 Combustion Air Flow (ESP) 75 m³/min Number of Winding Leads 12 Radiator Air Flow 1350 m³/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 m³/sec

⁽¹⁾ **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

⁽²⁾ **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 |
|---------------------------|
|---------------------------|

| 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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