

# PI 995P / PI 1097P

# **Industrial Generating Set**





MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 995P / PI 1097P	1800 / 60	480 / 277	1000.0 kVA / 800kWe	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				
Rated Output (PRP)	) <sup>(1)</sup>	898 kW <sub>m</sub>		
Rated Output (ESP)	1004 kW <sub>m</sub>			
Engine Make & Mod	Perkins 4008TAG2A			
No. of Cylinders		8 Vertical In-line		
Cycle		4 Strokes		
Aspiration		Turbocharged & Air to Air Charge Cooled		
Cooling Method		Water		
Governing Type		Electronic		
Governing Class		G2 - ISO 8528 Part 1		
Compression Ratio		13.6:1		
Displacement	30.56 L (1397.in <sup>3</sup> )			
BorexStroke	160x190 mm			
Battery and Charger	24 VDC , 40 Amp			
AIR SYSTEM				
Air Filter Type	Dry Element			
Combustion Air Flor	72 m³/min			
Combustion Air Flor	w (ESP)	75 m³/min		
Radiator Air Flow		1350 m³/min		
COOLING SYSTEM	Л			
Total Coolant Capa	city (L)	48 L (12.7 US gal)		
Water Pump Type		Centrifugal Eng-Driven		
Radiator Fan Load		56 kW		
Heat Radiation to Ro	om (PRP)	85 kW		
Heat Radiation to Ro	100 kW			
LUBRICATION SYS	STEM			
Oil Filter Type	Full-flov	w spin-on oil filters		
Total Oil Capacity		153 L (40.4 US gal)		
Oil Pan	153 L (40.4 US gal)			
Oil Type	API CH4/	CI4; SAE 15W-40		

 	_C\	/ST	1 – I.V.

Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	249 L/hr (65.77 US gal/hr)
Fuel Consumption 100% PRP	224 L/hr (59.17 US gal/hr)
Fuel Consumption 75% PRP	162 L/hr (42.79 US gal/hr)
Fuel Consumption 50% PRP	108 L/hr (28.53US gal/hr)

# **EXHAUST SYSTEM**

Muffler Type	Residential Grade
Max. Back Pressure	3 kPa
Exhaust Gas Flow	202 m³/min
Exhaust Gas Temperature	505 <sup>0</sup> C

# **ALTERNATOR SPECIFICATIONS**

Rated Output (Prime	1025 kVA	
Rated Output (Stand	1130 kVA	
Alternator Make & N	Leroysomer TAL0490	
Number of Poles	4	
Number of Winding	6	
Type of Bearing	Single	
Insulation Class / Tel	H/H	
Efficiency @ Rated	94.6%	
Ingress Protection F	IP 23	
Excitation System	Shunt	
AVR Model Leroyson		ner R150

### ALTERNATOR OPERATING DATA

Overspeed		2250 r.p.m	
Voltage Regulation	± 1 %		
Waveform distortion		No load < 3.5%, Linear load < 5%	
Radio Interface EN 61000		0-6-2 & EN 61000-6-4	
Cooling Air Flow		1.2 m³/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** 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 4 Analog Inputs Measurement Vac, A, Hz, kVA, kW, Vdc **Event Log** Alarms log, Hrs log

**USB** 

ENCLOSURE SPECIFICATIONS				
Enclosure Type	c & Weather Proof			
Anticorrosive Protection				
Polyester Powder Coated Galvanized Sheet				
Ingress Protection F	IP22			
Lifting ISO Star		ndard Lifting		
Emergency External E		mergency Push Button		
Container RAL Color		RAL 9001		
Baseframe RAL Color		RAL 9011		
Noise Pressure level @ 7m		85 dB(A)		
Baseframe RAL Color		RAL 9011		

#### **GENSET DIMENSIONS & WEIGHT**

Communication

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	4810	2620	2395	NA	8850	9150
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.

## 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.

## **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







