

PI 900P

Industrial Generating Set

MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 900P	1500 / 50	400 / 230	800 kVA / 640 kWe	900 kVA / 720 kWe

Full rated power available upto 100 meter elevation at ambient of 27degC, for other temperature and altitude limits please consult application team

NGINE SPECIFICATIONS			
Rated Output (PRP) (1)	705 kW _m		
Rated Output (ESP) (2)	786 kW _m		
Engine Make & Model	Perkins 4006-23TAG3A		
No. of Cylinders	6 Vertical In-line		
Cycle	4 Strokes		
Aspiration	Turbocharged & Air to Air Cooled		
Cooling Method	Water		
Governing Type	Electronic		
Governing Class	G2 - ISO 8528 Part 1		
Compression Ratio	13.6:1		
Displacement	22.9 L (1397.in ³)		
BorexStroke	160x190 mm		
Battery and Charger Alternator	24 VDC , 70 Amp		
AIR SYSTEM			
Air Filter Type	Dry Element		
Combustion Air Flow (PRP)	69 m³/min		
Combustion Air Flow (ESP)	73 m³/min		
Radiator Air Flow	1000 3/ :		
	1200 m³/min		
COOLING SYSTEM	1200 mymin		
COOLING SYSTEM Total Coolant Capacity (L)	105 L (27.7 US gal)		
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Water Pump Type	105 L (27.7 US gal) Centrifugal Eng-Driven		
Total Coolant Capacity (L) Water Pump Type Radiator Fan Load	105 L (27.7 US gal) Centrifugal Eng-Driven 26 kW		
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Total Coolant Capacity (L) Water Pump Type Radiator Fan Load Heat Radiation to Room (PRP) Heat Radiation to Room (ESP) UBRICATION SYSTEM Full-flow	105 L (27.7 US gal) Centrifugal Eng-Driven 26 kW 77 kW 86 kW replaceable 'Ecoplus' filter		

FUEL SYSTEM		
Fuel Filter: Replacea primary filter/water sep		fuel filter elements with
Recommended Fue	Class A2 Diesel	
Fuel Consumption S	202 L/hr (53.3 US gal/hr)	
Fuel Consumption 10	175 L/hr (46.2 US gal/hr)	
Fuel Consumption 75	132 L/hr (34.8 US gal/hr)	
Fuel Consumption 50	91 L/hr (24 US gal/hr)	
EXHAUST SYSTEM	Л	
Muffler Type	Residential Grade	
Max. Back Pressure	3 kPa	
Exhaust Gas Flow	193 m ³ /min	
Exhaust Gas Tempe	500°C	
ALTERNATOR SPE	CIFICATI	ONS
Rated Output (Prime) (1)		940 kVA
Rated Output (Stand	1010 kVA	
Alternator Make & M	Stamford S6L1D-D4	
Number of Poles		4
Number of Winding	Leads	6 Leads / 12 lead optional
Type of Bearing		Single
Insulation Class / Ter	mp Rise	H/H
Efficiency @ Rated	94.8%	
Ingress Protection R	IP 23	
Excitation System		Excited by P.M.G.
AVR Model Stamford		- MX321
ALTERNATOR OP	ERATING	DATA
Overspeed		2250 r.p.m
Voltage Regulation		± 0.5 %
Waveform distortion		No load < 1.5%, Linear load < 5%
Radio Interface EN 61000		0-6-2 & EN 61000-6-4

⁽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

Cooling Air Flow

⁽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.



1.42 m³/sec



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CONTROLLER SPECIFICATIONS				
Controller Make & N	DeepSea 6120			
Operation Mode	MRS / AMF (optional)			
Display Graphic Back		-lit LCD (128x64) pixles		
Ingress Protection F	IP65			
Binary Inputs/Outpu	6 / 4			
Analog Inputs	4			
Measurement Vac, A, H		z, kVA, kW, Vdc		
Event Log Alarms lo		g, Hrs log		
Communication USE				

ENCLOSURE SPECIFICATIONS				
Enclosure Type	c & Weather Proof			
Anticorrosive Protection				
Polyester Powder Coated Galvanized Sheet				
Ingress Protection Rating		IP23		
Lifting	Lifting ISO Star			
Emergency External E		mergency Push Button		
Canopy RAL Color	RAL 2000			
Baseframe RAL Color		RAL 9011		
Noise Pressure level @ 7m		85 dB(A)±3dB(A)		

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	4120	2320	2510	1695	6570	6800
CLOSE	20 FEET HC CONTAINER		1940	7330	7425	

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.

Residential 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



