

PI 850P

Industrial Generating Set

MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 850P	1500 / 50	400 / 230	770 kVA / 616 kWe	850 kVA / 680 kWe

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

IGINE SPECIFICA		070 1114	
Rated Output (PRP)	676 kW _m		
Rated Output (ESP)	743 kW _m		
Engine Make & Mod	Perkins 2806A - E18TTAG5		
No. of Cylinders		6 Vertical In-line	
Cycle		4 Strokes	
Aspiration		Turbocharged	
Cooling Method		Water	
Governing Type		Electronic	
Governing Class		G2 - ISO 8528 Part 1	
Compression Ratio		14:1	
Displacement	18.1 L (1104.in ³)		
BorexStroke		145x183 mm	
Battery and Charger	24 VDC , 50 Amp		
IR SYSTEM			
Air Filter Type		Dry Element	
Combustion Air Flow (PRP)		37 m³/min	
Combustion Air Flov	40 m ³ /min		
Radiator Air Flow	702 m³/min		
OOLING SYSTEM			
Total Coolant Capac	city (L)	110 litres	
Water Pump Type		Centrifugal Eng-Driven	
Radiator Fan Load	30 kW		
Heat Radiation to Ro	91 kW		
Heat Radiation to Ro	100 kW		
LIDDIC ATION OVE	STEM		
UBRICATION SYS		replaceable 'Ecoplus'	
Oil Filter Type	Full-flow	filter	
	Full-flow	filter 68 litres	
Oil Filter Type	Full-flow		

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FUEL SYSTEM			
Fuel Filter: Replaceable 'Ecopl primary filter/water separator	us' fuel filter elements with		
Recommended Fuel	Class A2 Diesel		
Fuel Consumption Standby	179 L/hr 47.3 Gal/hr		
Fuel Consumption 100% PRP	162 L/hr 42.8 Gal/hr		
Fuel Consumption 75% PRP	118 L/hr 31.152 Gal/hr		
Fuel Consumption 50% PRP	81 L/hr 21.38 Gal/hr		
EXHAUST SYSTEM			
Muffler Type	Residential Grade		
Max. Back Pressure	2 kPa		
Exhaust Gas Flow (PRP/ESP)	132 / 142 m ³ /min		
Exhaust Gas Temperature (PRP/ESP)	464°C/474°C		
ALTERNATOR SPECIFICATIONS			
Rated Output (Prime) ⁽¹⁾	810 kVA		
Rated Output (Standby) (2)	860 kVA		
Alternator Make & Model	Stamford S6L1D- C41		
Number of Poles	4		
Number of Winding Leads	6 Leads / 12 lead optional		
Type of Bearing	Single		
Insulation Class / Temp Rise	H/H		
Efficiency @ Rated Voltage	94.8%		
Ingress Protection Rating	IP 23		
Excitation System	PMG		
AVR Model Stamfo	ord - MX321		
ALTERNATOR OPERATIN	G DATA		
Overspeed	2250 r.p.m		
Voltage Regulation	± 0.5 %		
Waveform distortion	No load < 1.5%, Linear load < 5%		
Radio Interface EN 610	000-6-2 & EN 61000-6-4		
Cooling Air Flow	1.46 m³/soc		

⁽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.



1.46 m³/sec



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

Enclosure Type Acoust		ic & Weather Proof	
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection Rating		IP22	
Lifting ISO Star		ndard Lifting	
Emergency External E		mergency Push Button	
Canopy RAL Color	RAL 2000		
Baseframe RAL Col	RAL 9011		
Noise Pressure level @ 7m		86 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	3650	2295	2690	1430	5875	5990
CLOSE	5873	2224	2817	1835	8000	8464

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

Residential / Critical grade muffler

Fuel Filter / Water seperator Fuel Filter

Remote Annunciator

Application

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



