

PI 275P

Industrial Generating Set



PRIME (1) STANDBY (2) **MODEL** rpm / Hz **VOLTAGE** 400 / 230 **PI275P** 1500 / 50 250 kVA / 200 kWe 275 kVA / 220 kWe

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

ENGINE SPECIFICATIONS					
Rated Output (PRP)	226.2 kW _m				
Rated Output (ESP)	248.6 kW _m				
Engine Make & Moo	Perkins 1206A- E70TTAG3				
No. of Cylinders	6 Vertical In-line				
Cycle	4 Strokes				
Aspiration	Turbocharged Aftercooled				
Cooling Method	Water				
Governing Type	Electronic				
Governing Class	G2 - ISO 8528 Part 1				
Compression Ratio	15.8:1				
Displacement	7.01 L (427.7.in ³)				
BorexStroke (mm/in	BorexStroke (mm/in)				
Battery and Charger	12 VDC , 100 Amp				
AIR SYSTEM					
Air Filter Type	Dry Element				
		14.1 m ³ /min			
Combustion Air Flov	w (PRP)	14.1 m ³ /min			
Combustion Air Flow	* *	14.1 m ³ /min 15 m ³ /min			
	* *	-			
Combustion Air Flov	w (ESP)	15 m ³ /min			
Combustion Air Flow	w (ESP)	15 m ³ /min			
Combustion Air Flow Radiator Air Flow COOLING SYSTEM	w (ESP)	15 m ³ /min 370 m ³ /min			
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capac	w (ESP)	15 m ³ /min 370 m ³ /min 25 L (6.6 US gal)			
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type	(ESP)	15 m ³ /min 370 m ³ /min 25 L (6.6 US gal) Centrifugal Eng-Driven			
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load	w (ESP) Lity (L) om (PRP)	15 m ³ /min 370 m ³ /min 25 L (6.6 US gal) Centrifugal Eng-Driven 8 kW			
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Ro	w (ESP) // city (L) om (PRP) om (ESP)	15 m³/min 370 m³/min 25 L (6.6 US gal) Centrifugal Eng-Driven 8 kW 15 kW			
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Roo Heat Radiation to Roo	w (ESP) // city (L) om (PRP) om (ESP) STEM	15 m³/min 370 m³/min 25 L (6.6 US gal) Centrifugal Eng-Driven 8 kW 15 kW			
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Ro Heat Radiation to Ro LUBRICATION SYS	w (ESP) // city (L) om (PRP) om (ESP) STEM	15 m³/min 370 m³/min 25 L (6.6 US gal) Centrifugal Eng-Driven 8 kW 15 kW			
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Roo Heat Radiation to Roo LUBRICATION SYSTEM Oil Filter Type	w (ESP) // city (L) om (PRP) om (ESP) STEM	15 m³/min 370 m³/min 25 L (6.6 US gal) Centrifugal Eng-Driven 8 kW 15 kW 15 kW on full flow filter			

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FUEL SYSTEM					
Fuel Filter: Spin on primary,secondary and water filter separator					
Recommended Fuel	Class A2 Diesel				
Fuel Consumption Standby	64.5 L/hr				
Fuel Consumption 100% PRP	56.9 L/hr				
Fuel Consumption 75% PRP	41.5 L/hr				
Fuel Consumption 50% PRP	28.1 L/hr				
EXHAUST SYSTEM					
Muffler Type	Residential Grade				
Max. Back Pressure	10 kPa				
Exhaust Gas Flow (PRP/ESP)	37.5 / 40.4m ³ /min				
Exhaust Gas Temperature(PRP/ESP)	537°C/558°C				
ALTERNATOR SPECIFICATIONS					
Rated Output (Prime) (1)	250 kVA				
Rated Output (Standby) (2)	275 kVA				
Alternator Make & Model	Stamford UCDI274K				
Number of Poles	4				
Number of Winding Leads	12				
Type of Bearing	Single				
Insulation Class / Temp Rise	H/H				
Efficiency @ Rated Voltage	92.4%				
Ingress Protection Rating	IP 23				
Excitation System	Self Excited				
AVR Model Stamfo	rd - AS440				
ALTERNATOR OPERATIN	G DATA				
Overspeed	2250 r.p.m				
Voltage Regulation	± 1 %				
Waveform distortion	No load < 1.5%, Linear load < 5%				
Radio Interface EN 610	0-6-2 & EN 61000-6-4				
Cooling Air Flow	0.58 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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CONTROLLER SPECIFICATIONS Controller Make & Model DeepSea 6120 Operation Mode MRS / AMF (optional) Display Graphic Back-lit LCD (128x64) pixles Ingress Protection Rating **IP65** 8/6 Binary Inputs/Outputs 4 **Analog Inputs** Measurement Vac, A, Hz, kVA, kW, Vdc **Event Log** Alarms log, Hrs log

USB

Enclosure Type Acoustic & Weather Proof Anticorrosive Protection Polyester Powder Coated Galvanized Sheet Ingress Protection Rating IP22	ENCLOSURE SPECIFICATIONS						
Polyester Powder Coated Galvanized Sheet	Enclosure Type	oustic & Weather Proof					
	Anticorrosive Protection						
Ingress Protection Rating IP22	Polyester Powder Coated Galvanized Sheet						
	Ingress Protection R	IP22					
Lifting ISO Standard Lifting	Lifting	Standard Lifting					
Emergency External Emergency Push Butto	Emergency	nal Emergency Push Button					
Canopy RAL Color RAL 2000	Canopy RAL Color	RAL 2000					
Baseframe RAL Color RAL 9011	Baseframe RAL Cold	RAL 9011					
Noise Pressure level @ 7m 77 dB(A)±3 db(A)	Noise Pressure level	77 dB(A)±3 db(A)					

GENSET DIMENSIONS & WEIGHT

Communication

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	3000	1200	1830	668	1975	2000
CLOSE	4411	1614	2235	843	3290	3315

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



