

PI 14.3P

Industrial Generating Set

MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI14.3P	1500 / 50	400 / 230	13.0kVA / 10.4kWe	14.3kVA / 11.4kWe

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

eam.			
ENGINE SPECIFIC	ATIONS		
Rated Output (PRP)	12.2 kW _m		
Rated Output (ESP)	13.5 kW _m		
Engine Make & Mod	Perkins 403D-15G		
No. of Cylinders	3 Vertical In-line		
Cycle	4 Strokes		
Aspiration	Naturally Aspirated		
Cooling Method		Water	
Governing Type		Mechanical	
Governing Class		G2 - ISO 8528 Part 1	
Compression Ratio	22.5:1		
Displacement	1.49 L (91.3in ³)		
BorexStroke (mm/in)	84x90 / 3.3x3.5	
Battery and Charger	12 VDC, 65 Amp		
AIR SYSTEM			
Air Filter Type		Dry Element	
Combustion Air Flow	v (PRP)	1.1 m ³ /min	
Combustion Air Flov	v (ESP)	1.1 m ³ /min	
Radiator Air Flow		25.2 m³/min	
COOLING SYSTEM	1		
Total Coolant Capac	city (L)	6.0L (1.6 US gal)	
Water Pump Type		Centrifugal Eng-Driven	
Radiator Fan Load	0.3 kW		
Heat Radiation to Ro	om (PRP)	3.2 kW	
Heat Radiation to Ro	3.5 kW		
LUBRICATION SYSTEM			
Oil Filter Type	Oil Filter Type Spin		
Total Oil Capacity	6.0L (1.6 US gal)		
Oil Pan		4.5L(1.18 US gal)	
Oil Type	CI4; SAE 15W-40		

FUEL SYSTEM			
Fuel Filter: Split element fuel filter			
Recommended Fue	Class A2 Diesel		
Fuel Consumption S	4.8 L/hr (1.05 US gal/hr		
Fuel Consumption 10	3.6 L/hr (0.95 US gal/hr		
Fuel Consumption 75	Fuel Consumption 75% PRP		
Fuel Consumption 50	2 L/hr (0.53 US gal/hr)		
EXHAUST SYSTE			
Muffler Type		Residential Grade	
Max. Back Pressure	Э	10.2 kPa	
Exhaust Gas Flow (F	2.7 / 2.9 m ³ /min		
Exhaust Gas Temperature(PRP/B	445°C/490°C		
ALTERNATOR SPECIFICATIONS			
Rated Output (Prim	15 kVA		
Rated Output (Stand	dby) ⁽²⁾	16.5 kVA	
Alternator Make & N	Model	Stamford S0L1-P1	
Number of Poles		4	
Number of Winding	Leads	12	
Type of Bearing		Single	
Insulation Class / Te	mp Rise	H/H	
Efficiency @ Rated	Voltage	82.60%	
Ingress Protection F	Rating	IP 23	
Excitation System		Self Excited	
AVR Model	Stamford	- AS540	
ALTERNATOR OPERATING DATA			
Overspeed		2250 r.p.m	
Voltage Regulation		± 1.0 %	
Waveform distortion		No load < 2.5%, Linear load < 5%	
Radio Interface Standard		EN61000-6-2:2001	
Cooling Air Flow		0.058 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 & N	DeepSea 4520MKI			
Operation Mode	MRS / AMF (optional)			
Display Graphic Back		x-lit LCD (128x64) pixles		
Ingress Protection F	IP65			
Binary Inputs/Outpu	4 / 4			
Analog Inputs	3			
Measurement Vac, A, H		z, kVA, kW, Vdc		
Event Log Alarms Id		g, Hrs log		
Communication	USB			

ENCLOSURE SPECIFICATIONS			
Enclosure Type Acousti			
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection Rating			
Lifting ISO Star			
Emergency External E			
Canopy RAL Color			
Baseframe RAL Color			
Noise Pressure level @ 7m			
	Acoustiction Coated Galve Rating ISO Star External E		

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	1635	750	1260	92	495	510
CLOSE	2152	1004	1342	169	730	765

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

Pre heating system

Static Battery Charger

Critical grade muffler

Electronic governor

Remote Annunciator

Application

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



