PI 400P

Industrial Generating Set



MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI400P	1500 / 50	400 / 230	350 kVA / 280kWe	400 kVA / 320 kWe

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

eam. ENGINE SPECIFIC	ATIONS			
Rated Output (PRP)	324 kW _m			
Rated Output (ESP)	368 kW _m			
Engine Make & Mod	Perkins 2206A-E13TAG2			
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	16.3:1			
Displacement	12.5 L(762.in ³)			
BorexStroke	130x157 mm			
Battery and Charger	24 VDC , 70 Amp			
AIR SYSTEM				
Air Filter Type	Dry Element			
Combustion Air Flow	v (PRP)	21.3 m ³ /min		
Combustion Air Flov	v (ESP)	23.6 m ³ /min		
Radiator Air Flow		563 m³/min		
COOLING SYSTEM	1			
Total Coolant Capad	city (L)	51.4 L (13.57 US gal)		
Water Pump Type		Centrifugal Eng-Driven		
Radiator Fan Load		14 kW		
Heat Radiation to Ro	om (PRP)	24.1 kW		
Heat Radiation to Ro	32.2 kW			
LUBRICATION SYSTEM				
Oil Filter Type	Full-flow r	eplaceable 'Ecoplus' filter		
Total Oil Capacity	40 L (10.5 US gal)			
Oil Pan	38 L (10 US gal)			
Oil Type API CH4/		CI4; SAE 15W-40		

FUEL SYSTEM	
Fuel Filter: Replaceable 'Ecop	olus' fuel filter elements with
primary filter/water separator	
Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	80 L/hr (21.1 US gal/hr)
Fuel Consumption 100% PRF	71 L/hr (18.75 US gal/h
Fuel Consumption 75% PRP	54 L/hr (14.3 US gal/hr)
Fuel Consumption 50% PRP	37 L/hr (9.8 US gal/hr)
EXHAUST SYSTEM	
Muffler Type	Residential Grade
Max. Back Pressure	6.8 kPa
Exhaust Gas Flow (PRP/ESP)	56.6 / 64.8 m ³ /min
Exhaust Gas Temperature	630°C
ALTERNATOR SPECIFICA	ATIONS
Rated Output (Prime) (1)	360 kVA
Rated Output (Standby) (2)	415 kVA
Alternator Make & Model	Stamford S4L1D- E41
Number of Poles	4
Number of Winding Leads	12
Type of Bearing	Single
Insulation Class / Temp Rise	H/H
Efficiency @ Rated Voltage	92.5%
Ingress Protection Rating	IP 23
Excitation System	Self Excited
AVR Model Stamf	ord - AS440
ALTERNATOR OPERATIN	IG DATA
Overspeed	2250 r.p.m
Voltage Regulation	± 1 %
Waveform distortion	No load < 1.5%, Linear load < 5%
Radio Interface EN 61	000-6-2 & EN 61000-6-4
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⁽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.



0.8 m³/sec



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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** Binary Inputs/Outputs 6/4 Analog Inputs Measurement Vac, A, Hz, kVA, kW, Vdc **Event Log** Alarms log, Hrs log Communication **USB**

ENCLOSURE SPECIFICATIONS					
Enclosure Type Acousti					
Anticorrosive Protection					
Polyester Powder Coated Galvanized Sheet					
Ingress Protection Rating					
ISO Stan	dard Lifting				
Emergency External E					
Canopy RAL Color					
Baseframe RAL Color					
Noise Pressure level @ 7m					
	Acousti ition oated Galva Rating ISO Stan External E				

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)Appx	Wet Weight (kg)Appx
OPEN	3500	1695	2275	820	3800	3950
CLOSE	5170	1590	2600	1020	5000	5150

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





