PI 1385P

Industrial Generating Set



MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 1385P	1500 / 50	400 / 230	1250 kVA / 1000kWe	1385 kVA / 1108 kWe

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

ENGINE SPECIFIC	ATIONS		
Rated Output (PRP)	(1)	1113 kW _m	
Rated Output (ESP)	1224 kW _m		
Engine Make & Mod	Perkins 4012-46TW		
No. of Cylinders		12, 60° Vee form	
Cycle		4 Strokes	
Aspiration		Turbocharged & Air to Water Charge Cooled	
Cooling Method		Water	
Governing Type		Electronic	
Governing Class		G2 - ISO 8528 Part 1	
Compression Ratio		13.6:1	
Displacement	45.8 L (2746in ³)		
BorexStroke (mm/in)	160x190 /6.3x7.5	
Battery and Charger	24 VDC , 40 Amp		
AIR SYSTEM			
Air Filter Type	Dry Element		
Combustion Air Flow	v (PRP)	102 m ³ /min	
Combustion Air Flow	v (ESP)	109 m ³ /min	
Radiator Air Flow		1680 m³/min	
COOLING SYSTEM	1		
Total Coolant Capac	city (L)	201 L (53 US gal)	
Water Pump Type	Centrifugal Eng-Driven		
Radiator Fan Load		58 kW	
Heat Radiation to Ro	81 kW		
Heat Radiation to Room (ESP)		89 kW	
LUBRICATION SYSTEM			
Oil Filter Type	Full-flo	w spin-on oil filters	
	177 L (40.4US gal)		
Total Oil Capacity		= (ga.,)	
Total Oil Capacity Oil Pan		159 L (42 US gal)	

FUEL SYSTEM			
Fuel Filter: Full-flow spin-on fuel oil filters			
Recommended Fuel	Class A2 Diesel		
Fuel Consumption Standby	288 L/hr (76 US gal/hr)		
Fuel Consumption 100% PRP	259 L/hr (68.4 US gal/hr)		
Fuel Consumption 75% PRP	196 L/hr (51.7 US gal/hr)		
Fuel Consumption 50% PRP	143 L/hr (37.7 US gal/hr)		
EXHAUST SYSTEM			
Muffler Type	Residential Grade		
Max. Back Pressure	5 kPa		
Exhaust Gas Flow	180 m³/min		
Exhaust Gas Temperature	422°C		
ALTERNATOR SPECIFICAT	TIONS		
Rated Output (Prime) (1)	1400 kVA		
Rated Output (Standby) (2)	1500 kVA		
Alternator Make & Model	STAMFORD S6L1D-H41		
Number of Poles	4		
Number of Winding Leads	6		
Type of Bearing	Single		
Insulation Class / Temp Rise	H/H		
Efficiency @ Rated Voltage	94.8%		
Ingress Protection Rating	IP 23		
Excitation System	Excited by P.M.G.		
AVR Model Stamford	d - MX321		
ALTERNATOR OPERATING	DATA		
Overspeed	2250 r.p.m		
Voltage Regulation	± 0.5 %		
Waveform distortion	No load < 1.5%,		

Waveform distortion

Radio Interface 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.



Linear load < 5%

EN 61000-6-2 & EN 61000-6-4

1.89 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



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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, H		z, kVA, kW, Vdc		
Event Log Alarms lo		g, Hrs log		
Communication	USB			

ENCLOSURE SPECIFICATIONS			
Enclosure Type	c & Weather Proof		
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection F	IP22		
Lifting	Lifting ISO Star		
Emergency External E		mergency Push Button	
Canopy RAL Color	RAL 9001		
Baseframe RAL Col	RAL 9011		
Noise Pressure level @ 7m		87 dB(A)±3dB(A)	

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg) appx	Wet Weight (kg) appx
OPEN	5000	2455	2650	NA	10777	10877
CLOSE	30 Feet ISO HC Container		NA	13942	14042	

Note: Dimensions are for priliminary guidance, Please refer to the general arrangement drawing.

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



