

PI 1385P

Industrial Generating Set



MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 1385P	1500 / 50	400 / 230	1250 kVA / 1000kWe	1375 kVA / 1100 kWe

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

consult application team ENGINE SPECIFIC			
Rated Output (PRP)	1113 kW _m		
Rated Output (ESP)	1224 kW _m		
Engine Make & Mod	Perkins 4012-46TWG2A		
No. of Cylinders	12, 60° Vee form		
Cycle	4 Strokes		
Aspiration		Turbocharged	
Cooling Method		Water	
Governing Type		Electronic	
Governing Class		G2 - ISO 8528 Part 1	
Compression Ratio	13.6:1		
Displacement	45.8 L (2746in ³)		
Bore x Stroke (mm	/ in)	160x190 / 6.3x7.5	
Battery and Charger	Alternator	24 VDC , 40 Amp	
AIR SYSTEM			
Air Filter Type		Dry Element	
Combustion Air Flor	102 m ³ /min		
Combustion Air Flow	w (ESP)	109 m ³ /min	
Radiator Air Flow		1680 m³/min	
COOLING SYSTEM	Л		
Total Coolant Capa	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-flow spin-on oil filters		
Total Oil Capacity	177 L (40.4US gal)		
Oil Pan	159 L (42	! US gal)	
Oil Type	API CH4/CI4; SAE 15		

FUEL SYSTEM			
Fuel Filter: Full-flow spin-on fuel oil filters			
Recommended Fue	Class A2 Diesel		
Fuel Consumption	288 L/hr (76 US gal/hr)		
Fuel Consumption 1	Fuel Consumption 100% PRP		
Fuel Consumption 7	Fuel Consumption 75% PRP		
Fuel Consumption 5	143 L/hr (37.7 US gal/hr)		
EXHAUST SYSTE	М		
Muffler Type		Residential Grade	
Max. Back Pressure	Э	3 kPa	
Exhaust Gas Flow		180 m ³ /min	
Exhaust Gas Temp	422 ⁰ C		
ALTERNATOR SP	ECIFICAT	IONS	
Rated Output (Prim	e) ⁽¹⁾	1250 kVA	
Rated Output (Stan	dby) ⁽²⁾	1375 kVA	
Alternator Make & N	leroy somer LSA 50.2 M6		
Number of Poles		4	
Number of Winding	Leads	6	
Type of Bearing		Single	
Insulation Class / Te	mp Rise	H/H	
Efficiency @ Rated	Voltage	95.0%	
Ingress Protection I	Rating	IP 23	
Excitation System		AREP / PMG	
AVR Model	D350		
ALTERNATOR OP	ERATING	DATA	
Overspeed		2250 r.p.m	
Voltage Regulation	± 0.25 %		
Waveform distortion	No-load <3.5 %, Linear load <3.5 %		
Radio Interface	Radio Interface EN 61000		

⁽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.



1.8 m³/sec



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CONTROLLER SPECIFICATIONS			
Controller Make & N	DeepSea 6120		
Operation Mode	MRS / AMF (optional)		
Display Graphic Back		-lit LCD (128x64) pixles	
Ingress Protection F	IP65		
Binary Inputs/Outpu	8 / 6		
Analog Inputs		4	
Measurement Vac, A, H		z, kVA, kW, Vdc	
Event Log Alarms lo		g, Hrs log	
Communication	USB		

ENCLOSURE SPECIFICATIONS			
Enclosure Type Acous		ic & Weather Proof	
Anticorrosive Protection			
Polyurethane paint with anti corrosive base coat.			
Ingress Protection F	IP23		
Lifting ISO Star		ndard Lifting	
Emergency External E		mergency Push Button	
Canopy RAL Color	RAL 2000		
Baseframe RAL Col	RAL 9011		
Noise Pressure leve	84 dB(A)		

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	5000	2455	2650	2100	NA	NA
CLOSE	30 Feet ISO HQ Container		NA	13942	14042	

Note: The following dimensions are for preliminary guidance. For more detailed and accurate dimensions, 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



