

PI 1710P / PI 1880P

Industrial Generating Set



MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 1710P / PI 1880P	1800 / 60	480 / 277	1710 kVA / 1368kWe	1880 kVA / 1504 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	i.			
ENGINE SPECIFIC	ATIONS			
Rated Output (PRP)) (1)	1440 kW _m		
Rated Output (ESP)	1583 kW _m			
Engine Make & Mod	Perkins 4012- 46TAG3A			
No. of Cylinders		12, V		
Cycle	4 Strokes			
Aspiration		Turbocharged & Air to Air Charge Cooled		
Cooling Method		Water		
Governing Type		Electronic		
Governing Class		G2 - ISO 8528 Part 1		
Compression Ratio		12.8:1		
Displacement	45.84 L (2794.in ³)			
BorexStroke (mm)	160x190			
Battery and Charger	24 VDC , 55 Amp			
AIR SYSTEM				
Air Filter Type	Dry Element			
Combustion Air Flow (PRP)		144 m³/min		
Combustion Air Flow	w (ESP)	150.8 m ³ /min		
Radiator Air Flow		2046 m³/min		
COOLING SYSTEM	1			
Total Coolant Capa	city (L)	233 L (61.5 US gal)		
Water Pump Type		Centrifugal Eng-Driven		
Radiator Fan Load		86 kW		
Heat Radiation to Ro	om (PRP)	116.1 kW		
Heat Radiation to Room (ESP)		120 kW		
LUBRICATION SYSTEM				
Oil Filter Type	Full-flo	w spin-on oil filters		
Total Oil Capacity		157.5 L (41.6 US gal)		
Oil Pan		115 L (30.4 US gal)		
Oil Type	API CH4/	/CI4; SAE 15W-40		

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Fuel Filter:	Full-flow	spin-on	fuel	oil	filters
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Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	390.6 L/hr (103.1 US gal/hr
Fuel Consumption 100% PRP	380 L/hr (100.3US gal/hr)
Fuel Consumption 75% PRP	286.4 L/hr (75.6 US gal/hr)
Fuel Consumption 50% PRP	191.8 L/hr (50.6 US gal/hr)

EXHAUST SYSTEM

Muffler Type	Residential Grade
Max. Back Pressure	5 kPa
Exhaust Gas Flow	344.9 m ³ /min
Exhaust Gas Temperature	405°C

ALTERNATOR SPECIFICATIONS

Rated Output (Prime	2000 kVA		
Rated Output (Standby) (2)		2200 kVA	
Alternator Make & Model		Leroysomer LSA50.2VL10	
Number of Poles		4	
Number of Winding Leads		6	
Type of Bearing		Single	
Insulation Class / Temp Rise		H/H	
Efficiency @ Rated Voltage		95.4%	
Ingress Protection Rating		IP 23	
Excitation System		Aux winding/ PMG	
AVP Model Leroysom		ner D350	

AVR Model	Leroysomer D350
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ALTERNATOR OPERATING DATA				
Overspeed		2250 r.p.m		
Voltage Regulation		± 0.25 %		
Waveform distortion		No load < 3.5%, Linear load < 5%		
Radio Interface	EN 61000	0-6-2 & EN 61000-6-4		
Cooling Air Flow		2.2 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 6120MKIII		
Operation Mode		MRS / AMF (optional)		
Display	Graphic Back	z-lit LCD (128x64) pixles		
Ingress Protection Rating		IP65		
Binary Inputs/Outputs		8 / 6		
Analog Inputs	Analog Inputs			
Measurement	Measurement Vac, A, H			
Event Log	Event Log Alarms lo			
Communication	USB			

ENCLOSURE SPECIFICATIONS				
Enclosure Type	Acoustic & Weather Proof			
Anticorrosive Protection				
Polyester Powder Coated Galvanized Sheet				
Ingress Protection Rating IP22				
Lifting	ISO Standard Lifting			
Emergency	External Emergency Push Button			
Canopy RAL Color		RAL 9001		
Baseframe RAL Color		RAL 9011		
Noise Pressure leve	el @ 7m	87 dB(A)		

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	6000	2275	2875	NA	11500	11600
CLOSE	9000	2350	3850	NA	18500	18600

Note: The following dimensions are for preliminary guidance. For more detailed and accurate dimensions, please refer to the General Arrangement Drawing(GAD).

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



