

PI 500P / PI 563P

POWERED BY **8 Perkins**

Industrial Generating Set

MODEL	rpm / Hz	VOLTAGE	PRIME ⁽¹⁾	STANDBY ⁽²⁾
PI 500P / PI 563P	1800 / 60	480 / 277	500 kVA / 400kWe	563 kVA / 450.4 kWe

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

Rated Output (PRP) ⁽¹⁾ 458 kW _m		Fuel Filter: Replaceable 'Ecoplus' fuel filter elements with primary filter/water separator		
Rated Output (ESP) ⁽²⁾	514 kW _m	Recommended Fue	Recommended Fuel	
Engine Make & Model	Perkins 2506A-E15TAG1	Fuel Consumption S	Fuel Consumption Standby	
No. of Cylinders	6 Vertical In-line	Fuel Consumption 10	Fuel Consumption 100% PRP	
Cycle	4 Strokes	Fuel Consumption 75	Fuel Consumption 75% PRP	
Aspiration	Turbocharged	Fuel Consumption 50	0% PRP	52 L/hr (13.73 US gal/hr)
Cooling Method	Water	EXHAUST SYSTEM	Л	
Governing Type	Electronic	Muffler Type		Residential Grade
Governing Class	G2 - ISO 8528 Part 1	Max. Back Pressure	9	6.8 kPa
Compression Ratio	16:1	Exhaust Gas Flow (P	PRP/ESP)	96 / 105.3 m ³ /min
Displacement	15.2 L (927.in ³)	Exhaust Gas Tempe	Exhaust Gas Temperature	
BorexStroke	137x171 mm	ALTERNATOR SPECIFICATIONS		IONS
Battery and Charger Alternator	24 VDC , 70 Amp	Rated Output (Prime	Rated Output (Prime) ⁽¹⁾	
AIR SYSTEM		Rated Output (Standby) ⁽²⁾		690 kVA
Air Filter Type	Dry Element	Alternator Make & N	Alternator Make & Model	
Combustion Air Flow (PRP)	34.3 m ³ /min	Number of Poles		4
Combustion Air Flow (ESP)	38 m ³ /min	Number of Winding Leads		6
Radiator Air Flow	866 m³/min	Type of Bearing		Single
COOLING SYSTEM		Insulation Class / Te	Insulation Class / Temp Rise	
Total Coolant Capacity (L)	58 L (15.3 US gal)	Efficiency @ Rated	Efficiency @ Rated Voltage	
Water Pump Type	Centrifugal Eng-Driven	Ingress Protection F	Ingress Protection Rating	
Radiator Fan Load	15.5 kW	Excitation System		Self Excited
Heat Radiation to Room (PRP)	30.5 kW	AVR Model Leroyson		mer R150
Heat Radiation to Room (ESP)	32.5 kW	ALTERNATOR OP	ALTERNATOR OPERATING	
LUBRICATION SYSTEM		Overspeed		2250 r.p.m
Oil Filter Type Full-flow re	eplaceable 'Ecoplus' filter	Voltage Regulation	Voltage Regulation	
Total Oil Capacity	62 L (16.4 US gal)	Waveform distortion	Waveform distortion	
Oil Pan	53 L (14 US gal)	Radio Interface	EN 6100	0-6-2 & EN 61000-6-4
Oil Type API CH4	4/CI4; SAE 15W-40	Cooling Air Flow 1.1 m ³ /sec		1.1 m ³ /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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Industrial Generating Set

OWERED BY	88	Per	kins
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CONTROLLER SPECIFICATIONS				
Controller Make & Model		DeepSea 6120MKIII		
Operation Mode		MRS / AMF (optional)		
Display	Graphic Back	-lit LCD (128x64) pixles		
Ingress Protection Rating		IP65		
Binary Inputs/Outputs		8 / 6		
Analog Inputs		4		

USB

ENCLOSURE SPECIFICATIONS			
Enclosure Type Acousti		ic & Weather Proof	
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection F	IP22		
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	3500	1725	2385	928	4390	4450
CLOSE	5205	1624	2618	1020	5435	5515

Note: These dimensions are for preliminary guidance. Please refer to GA drawing for asbuilt dimension.

Vac, A, Hz, kVA, kW, Vdc

Alarms log, Hrs log

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.

Measurement

Communication

Event Log

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.

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

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.



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ISO