

PI 150P

Industrial Generating Set



MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI150P	1500 / 50	400 / 230	140.0 kVA / 112kWe	150 kVA / 120kWe

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		FUEL SYSTEM			
Rated Output (PRP) (1)		127 kW _m	Fuel Filter: Ecoplus	fuel filte		
Rated Output (ESP) (2)		139.9 kW _m	Recommended Fu	el		
Engine Make & Model		Perkins 1106A-70TG1	Fuel Consumption	Standb		
No. of Cylinders		6 Vertical In-line	Fuel Consumption 1	00% PF		
Cycle		4 Strokes	Fuel Consumption 7	'5% PRI		
Aspiration		Turbocharged	Fuel Consumption 5	0% PR		
Cooling Method		Water	EXHAUST SYSTE	М		
Governing Type		Mechanical	Muffler Type			
		G2 - ISO 8528 Part 1	Max. Back Pressur	re .		
Compression Ratio		18.2:1	Exhaust Gas Flow (PRP/ES		
Displacement		7 L (428.in ³)	Exhaust Gas Temp	perature		
BorexStroke (mm/in)	105x135 / 4.1x 5.3	ALTERNATOR SE	ALTERNATOR SPECIFI		
Battery and Charger	Alternator	12 VDC , 65 Amp	Rated Output (Prin	Rated Output (Prime) (1)		
IR SYSTEM			Rated Output (Star	ndby) ⁽²		
Air Filter Type		Dry Element	Alternator Make &	Alternator Make & Model		
Combustion Air Flow	v (PRP)	7.64 m ³ /min	Number of Poles	Number of Poles		
Combustion Air Flov	v (ESP)	8.1 m ³ /min	Number of Winding	Number of Winding Leads		
Radiator Air Flow		252 m³/min	Type of Bearing	Type of Bearing		
OOLING SYSTEM	Λ		Insulation Class / Te	emp Ris		
Total Coolant Capacity (L)		21L (5.54 US gal)	Efficiency @ Rated	Efficiency @ Rated Voltag		
Water Pump Type		Centrifugal Eng-Driven	Ingress Protection	Ingress Protection Rating		
Radiator Fan Load		8.9 kW	Excitation System	Excitation System		
Heat Radiation to Room (PRP)		13.5 kW	AVR Model	R12		
Heat Radiation to Room (ESP)		16.4 kW	ALTERNATOR OF	PERAT		
UBRICATION SYS	STEM		Overspeed			
Oil Filter Type Spin o		on full flow filter	low filter Voltage Regulation			
Total Oil Capacity		18 L (4.7 US gal)	Waveform distortion			
Oil Pan		16.1 L (3.93 US gal)	Radio Interface	EN 6		
Oil Type API CH4/		CI4; SAE 15W-40	Cooling Air Flow	·		

FUEL SYSTEM			
Fuel Filter: Ecoplus fuel filter			
Recommended Fue	Class A2 Diesel		
Fuel Consumption	33.8 L/hr (10.3 US gal/hr)		
Fuel Consumption 10	00% PRP	30.28 L/hr (9.3 US gal/hr)	
Fuel Consumption 75	5% PRP	22.7 L/hr (6.86 US gal/hr)	
Fuel Consumption 50	0% PRP	15.9 L/hr (4.62 US gal/hr)	
EXHAUST SYSTE	М		
Muffler Type		Residential Grade	
Max. Back Pressure	9	6 kPa	
Exhaust Gas Flow (F	PRP/ESP)	20.75 / 22.6 m ³ /min	
Exhaust Gas Temp	576°C		
ALTERNATOR SPECIFICATIONS			
Rated Output (Prim	e) ⁽¹⁾	135 kVA	
Rated Output (Stan	dby) ⁽²⁾	143 kVA	
Alternator Make & N	Leroysomer TAL 044H		
Number of Poles	4		
Number of Winding	Leads	6/12	
Type of Bearing		Single	
Insulation Class / Te	mp Rise	H/H	
Efficiency @ Rated	Voltage	91.7%	
Ingress Protection I	Rating	IP 23	
Excitation System		Self Excited	
AVR Model	R120		
ALTERNATOR OP	ERATING	DATA	
Overspeed	2250 r.p.m		
Voltage Regulation	± 1 %		
Waveform distortion	No load < 1.5%, Linear load < 5%		
Radio Interface	0-6-2 & EN 61000-6-4		
Cooling Air Flow	0.29 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 & N	Controller Make & Model		
Operation Mode	Operation Mode		
Display	Graphic Back-lit LCD (128x64) pixles		
Ingress Protection F	Ingress Protection Rating		
Binary Inputs/Outputs		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	Acoustic & Weather Proof		
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection F	IP23		
Lifting	ISO Standard Lifting		
Emergency	External Emergency Push Buttor		
Canopy RAL Color		RAL 9010	
Baseframe RAL Color		RAL 9010	
Noise Pressure level @ 7m		74 dB(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	2760	900	1696	TBA	1515	1575
CLOSE	3764	1155	1881	455	1982	2020

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.

Rsidential 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



