PI 250P

Industrial Generating Set

POWERED BY



| MODEL | rpm / Hz | VOLTAGE | PRIME (1) | STANDBY (2) |
|---------|-----------|-----------|-------------------|-------------------|
| PI 250P | 1800 / 60 | 480 / 277 | 225 kVA / 180 kWe | 250 kVA / 200 kWe |

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

| please consult applica ENGINE SPECIFIC | | | | |
|--|----------------------------------|--|--|--|
| Rated Output (PRP) | 216.6 kWm | | | |
| Rated Output (ESP) | 238.6 kW _m | | | |
| Engine Make & Mod | Perkins 1206A-E70TTAG1 | | | |
| No. of Cylinders | 6 Vertical In-line | | | |
| Cycle | 4 Strokes | | | |
| Aspiration | Turbocharged Aftercooled | | | |
| Cooling Method | | Water cooling | | |
| Governing Type | Electronic | | | |
| Governing Class | G2 - ISO 8528 Part 1 | | | |
| Compression Ratio | 15.8:1 | | | |
| Displacement | 7.01 L (427.78 in ³) | | | |
| BorexStroke (mm/ir | 1) | 105x135 / 4.13x5.3 | | |
| Battery and Charger | 12 VDC , 100 Amp | | | |
| AIR SYSTEM | | | | |
| Air Filter Type | | Dry Element | | |
| Combustion Air Flor | w (PRP) | 13.5 m ³ /min | | |
| Combustion Air Flow | 14.1 m ³ /min | | | |
| Radiator Air Flow | 5.62 m³/sec | | | |
| COOLING SYSTEM | Л | | | |
| Total Coolant Capa | city (L) | 25 L (6.6 US gal) | | |
| Water Pump Type | | Centrifugal Eng-Driven | | |
| Radiator Fan Load | 15 kW | | | |
| Heat Radiation to Ro | 128.8 kW | | | |
| Heat Radiation to Ro | 141.7 kW | | | |
| LUBRICATION SYSTEM | | | | |
| Oil Filter Type | Spir | n on full flow filter | | |
| 5/11/10/11/PO | | | | |
| Total Oil Capacity | | 16 L (4.2 US gal) | | |
| | | 16 L (4.2 US gal) 13 L (3.4 US gal) | | |

| FUEL SVOTEM | | | |
|--------------------------|-----------------------------------|-----------------------|--|
| FUEL SYSTEM Fuel Filter | | Snin on | |
| Recommended Fue | Spin on | | |
| | Class A2 Diesel | | |
| Fuel Consumption S | 61.1 lit/hr / 16.14 US gal/hr | | |
| Fuel Consumption 10 | 54.5 lit/hr / 14.40 US gal/hr | | |
| Fuel Consumption 75 | 40.4 lit/hr / 10.67 US gal/hr | | |
| Fuel Consumption 50 | 27.8 lit/hr / 7.34 US gal/hr | | |
| EXHAUST SYSTEN | Л | | |
| Muffler Type | | Residential | |
| Max. Back Pressure | TBD | | |
| Exhaust Gas Flow (P | 28.14 / 30.82 m ³ /min | | |
| Exhaust Gas Tempe | 500.1 °C | | |
| ALTERNATOR SPE | ECIFICA ^T | TIONS | |
| Rated Output (Prime) (1) | | 250 kVA | |
| Rated Output (Stand | 275 kVA | | |
| Alternator Make & M | Leroysomer TAL044M | | |
| Number of Poles | | 4 | |
| Number of Winding | Leads | 6 | |
| Type of Bearing | | Single | |
| Insulation Class / Ten | np Rise | H/H | |
| Efficiency @ Rated | Voltage | 93.0% | |
| Ingress Protection R | IP 23 | | |
| Excitation System | | Self Excited | |
| · | | mer R120 | |
| ALTERNATOR OPI | ERATING | G DATA | |
| Overspeed | | 2250 r.p.m | |
| Voltage Regulation | ± 1 % | | |
| Waveform distortion | No load < 2%, Linear load < 5% | | |
| Radio Interface | EN 6100 | 00-6-2 & EN 61000-6-4 | |
| | | | |

⁽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.



0.34 m³/sec

PI 250P

Industrial Generating Set



CONTROLLER SPECIFICATIONS Controller Make & Model DeepSea 6120MKIII Operation Mode MRS / AMF (optional) Display Graphic Back-lit LCD (128x64) pixles Ingress Protection Rating **IP65** 8/6 Binary Inputs/Outputs 4 **Analog Inputs** Measurement Vac, A, Hz, kVA, kW, Vdc Alarms log, Hrs log Event Log Communication **USB**

| ENCLOSURE SPECIFICATIONS | | | |
|--|--------------------|----------------------|--|
| Enclosure Type | ic & Weather Proof | | |
| Anticorrosive Protection | | | |
| Polyester Powder Coated Galvanized Sheet | | | |
| Ingress Protection R | IP22 | | |
| Lifting | ISO Stan | dard Lifting | |
| Emergency | External E | mergency Push Button | |
| Canopy RAL Color | RAL 2000 | | |
| Baseframe RAL Col | RAL 9011 | | |
| Noise Pressure level @ 7m | | 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 | 3015 | 1000 | 1980 | 515 | 2000 | 2050 |
| CLOSE | 4414 | 1600 | 2250 | 760 | 3290 | 3315 |

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

STANDARD MECHANICAL FEATURES

Genset design provides a low noise level with an optimized performance of the ventilation and exhaust systems at 50 $^{\circ}$ 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.

Industrial 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

Residential / Critical grade muffler

Fuel Filter / Water seperator Fuel Filter

Remote Annunciator

Application

Infrastructure, Industrial , Residential , Telecom, Defense , Mining , Aggriculture



