

PI 1510P / PI 1669P

Industrial Generating Set



| MODEL | rpm / Hz | VOLTAGE | PRIME (1) | STANDBY (2) |
|---------------------|-----------|-----------|--------------------|----------------------|
| PI 1510P / PI 1669P | 1800 / 60 | 480 / 277 | 1510 kVA / 1208kWe | 1669 kVA / 1335.2kWe |

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

| eam. ENGINE SPECIFIC | ATIONS | | FUEL SYSTEM | |
|------------------------------|------------|--|-----------------------|--|
| Rated Output (PRP) | (1) | 1332 kW _m | Fuel Filter: Full-flo | |
| Rated Output (ESP) (2) | | 1459 kW _m | Recommended F | |
| Engine Make & Mod | lel | Perkins 4012- 46TAG2A | Fuel Consumption | |
| No. of Cylinders | | 12, 60° Vee form | Fuel Consumption | |
| Cycle | | 4 Strokes | Fuel Consumption | |
| Aspiration | | Turbocharged & Air to Air Charge Cooled | Fuel Consumption | |
| Cooling Method | | Water | EXHAUST SYST | |
| Governing Type | | Electronic | Muffler Type | |
| Governing Class | | G2 - ISO 8528 Part 1 | Max. Back Pressi | |
| Compression Ratio | | 13:1 | Exhaust Gas Flow | |
| Displacement | | 45.8 L (2797.in ³) | Exhaust Gas Ten | |
| BorexStroke (mm/in) | | 160x190 /6.3x7.5 | ALTERNATOR S | |
| Battery and Charger | Alternator | 24 VDC , 40 Amp | Rated Output (Pri | |
| IR SYSTEM | | | Rated Output (Sta | |
| Air Filter Type | | Dry Element | Alternator Make 8 | |
| Combustion Air Flov | v (PRP) | 120 m ³ /min | Number of Poles | |
| Combustion Air Flow (ESP) | | 128 m ³ /min | Number of Windi | |
| Radiator Air Flow | | 1944 m³/min | Type of Bearing | |
| OOLING SYSTEM | 1 | | Insulation Class / | |
| Total Coolant Capac | city (L) | 210 L (55.5 US gal) | Efficiency @ Rate | |
| Water Pump Type | | Centrifugal Eng-Driven | Ingress Protection | |
| Radiator Fan Load | | 64 kW | Excitation System | |
| Heat Radiation to Ro | om (PRP) | 96 kW | AVR Model | |
| Heat Radiation to Room (ESP) | | 107 kW | ALTERNATOR C | |
| UBRICATION SYS | STEM | | Overspeed | |
| Oil Filter Type | Full-flo | w spin-on oil filters | Voltage Regulation | |
| Total Oil Capacity | | 177 L (46.75 US gal) | Waveform distortio | |
| Oil Pan | | 159 L (42 US gal) | Radio Interface | |
| Oil Type API CH4/ | | /CI4; SAE 15W-40 | Cooling Air Flow | |
| , , | | | | |

| FUEL SYSTEM | | | |
|---|-------------------------------------|-------------------|--|
| Fuel Filter: Full-flow spin-on fuel oil filters | | | |
| Recommended Fue | Class A2 Diesel | | |
| Fuel Consumption S | 341 L/hr (90. US gal/hr) | | |
| Fuel Consumption 10 | 310 L/hr (81.8 US gal/hr) | | |
| Fuel Consumption 7 | 234 L/hr (61.8 US gal/hr) | | |
| Fuel Consumption 50 | 157 L/hr (41.4 US gal/hr) | | |
| EXHAUST SYSTEM | Л | | |
| Muffler Type | Residential Grade | | |
| Max. Back Pressure | 3 kPa | | |
| Exhaust Gas Flow | 320 m ³ /min | | |
| Exhaust Gas Tempe | 455°C | | |
| ALTERNATOR SPE | IONS | | |
| Rated Output (Prime | 2019 kVA | | |
| Rated Output (Stand | 2162 kVA | | |
| Alternator Make & M | Stamford S7L1D-D4 | | |
| Number of Poles | | 4 | |
| Number of Winding | Leads | 6 | |
| Type of Bearing | | Single | |
| Insulation Class / Te | mp Rise | H/H | |
| Efficiency @ Rated | 95.6% | | |
| Ingress Protection R | IP 23 | | |
| Excitation System | | Excited by P.M.G. | |
| AVR Model | Stamford | l - MX341 | |
| ALTERNATOR OPI | ERATING | DATA | |
| Overspeed | 2250 r.p.m | | |
| Voltage Regulation | ± 1 % | | |
| Waveform distortion | No load < 1.5%, Linear load < 5% | | |

⁽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.



EN 61000-6-2 & EN 61000-6-4

3.16 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



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

| ENCLOSURE SPECIFICATIONS | | | | |
|--|----------------------|----------------------|--|--|
| Enclosure Type | c & Weather Proof | | | |
| Anticorrosive Protection | | | | |
| Polyester Powder Coated Galvanized Sheet | | | | |
| Ingress Protection F | IP22 | | | |
| Lifting | ISO Standard Lifting | | | |
| Emergency | External E | mergency Push Button | | |
| Container RAL Colo | RAL 9001 | | | |
| Baseframe RAL Col | RAL 9011 | | | |
| Noise Pressure leve | 86 dB(A) | | | |

GENSET DIMENSIONS & WEIGHT

| GENSET TYPE | Length (mm) | Width (mm) | Height (mm) | Fuel Tank Capacity (L) | Dry Weight (kg) | Wet Weight (kg) |
|-------------|--------------------------|---------------|-------------|---------------------------|-----------------|-----------------|
| OPEN | 6219 | 2005 | 2751 | NA | 10777 | 10850 |
| CLOSE | 30 Feet ISO HC Container | | NA | 15400 | 15500 | |

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

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

Critical grade muffler

Fuel Filter / Water seperator Fuel Filter

Remote Annunciator

Application

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







ISO