

PI 660P

Industrial Generating Set



| MODEL | rpm / Hz | VOLTAGE | PRIME (1) | STANDBY (2) |
|---------|-----------|-----------|-------------------|-------------------|
| PI 660P | 1500 / 50 | 400 / 230 | 600 kVA / 480 kWe | 660 kVA / 528 kWe |

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

| IGINE SPECIFIC | ATIONS | | |
|------------------------------|-----------------|---------------------------------|--|
| Rated Output (PRP) (1) | | 540 kW _m | |
| Rated Output (ESP) (2) | | 593 kW _m | |
| | | Perkins 2806A- E18TAG1A | |
| No. of Cylinders | | 6 Vertical In-line | |
| Cycle | | 4 Strokes | |
| Aspiration | | Turbocharged | |
| Cooling Method | | Water | |
| Governing Type | | Electrical | |
| Governing Class | | G2 - ISO 8528 Part 1 | |
| Compression Ratio | | 14.5:1 | |
| Displacement | | 18.1 L (1104.in ³) | |
| BorexStroke | | 145x183 mm | |
| Battery and Charger | 24 VDC , 70 Amp | | |
| R SYSTEM | | | |
| Air Filter Type | | Dry Element | |
| Combustion Air Flov | v (PRP) | 34 m³/min | |
| Combustion Air Flow (ESP) | | 36. m³/min | |
| Radiator Air Flow | | 702 m³/min | |
| OOLING SYSTEM | | | |
| Total Coolant Capad | city (L) | 61 L (16.1 US gal) | |
| Water Pump Type | | Centrifugal Eng-Driven | |
| Radiator Fan Load | | 9 kW | |
| Heat Radiation to Ro | om (PRP) | 38 kW | |
| Heat Radiation to Room (ESP) | | 42 kW | |
| JBRICATION SYS | STEM | | |
| Oil Filter Type | Full-flow | replaceable 'Ecoplus' filter | |
| Total Oil Capacity | | 62 L (16.3 US gal) | |
| Oil Pan | | 53 L (14 US gal) | |
| Oil Type API CH4/ | | | |

| FUEL SYSTEM | |
|---|-------------------------------------|
| Fuel Filter: Replaceable 'E with primary filter/water sepa | • |
| Recommended Fuel | Class A2 Diesel |
| Fuel Consumption Stand | oy 134 L/hr (35.4 US gal/hr) |
| Fuel Consumption 100% P | PRP 123 L/hr (32.5 US gal/hr) |
| Fuel Consumption 75% PF | RP 90 L/hr (23.7 US gal/hr) |
| Fuel Consumption 50% PF | RP 61 L/hr (16.1 US gal/hr) |
| EXHAUST SYSTEM | |
| Muffler Type | Residential Grade |
| Max. Back Pressure | 6 kPa |
| Exhaust Gas Flow (PRP/ES | SP) 96 / 104 m ³ /min |
| Exhaust Gas Temperatur (PRP/ESP) | e 568°C/571°C |
| ALTERNATOR SPECIFI | CATIONS |
| Rated Output (Prime) (1) | 610 kVA |
| Rated Output (Standby) (2 | 665 kVA |
| Alternator Make & Model | Stamford HCI544E / S5L1D-E4 |
| Number of Poles | 4 |
| Number of Winding Leads | s 12 |
| Type of Bearing | Single |
| Insulation Class / Temp Ri | se H/H |
| Efficiency @ Rated Voltage | ge 94.5% |
| Ingress Protection Rating | IP 23 |
| Excitation System | Self Excited |
| AVR Model Sta | mford - AS440 |
| ALTERNATOR OPERAT | TING DATA |
| Overspeed | 2250 r.p.m |
| Voltage Regulation | ± 1 % |
| Waveform distortion | No load < 1.5%, Linear load < 5% |
| Radio Interface EN | 61000-6-2 & EN 61000-6-4 |
| Cooling Air Flow | 1.035 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 | DeepSea 6120 | | | |
| Operation Mode | MRS / AMF (optional) | | | |
| Display Graphic Back | | x-lit LCD (128x64) pixles | | |
| Ingress Protection F | IP65 | | | |
| Binary Inputs/Outpu | 8 / 6 | | | |
| Analog Inputs | 4 | | | |
| Measurement Vac, A, | | z, kVA, kW, Vdc | | |
| Event Log Alarms lo | | g, Hrs log | | |
| Communication | USB | | | |

| ENCLOSURE SPECIFICATIONS | | | |
|--|----------------------|----------------------|--|
| Enclosure Type Acousti | | ic & Weather Proof | |
| Anticorrosive Protection | | | |
| Polyester Powder Coated Galvanized Sheet | | | |
| Ingress Protection Rating | | IP22 | |
| Lifting | ISO Standard Lifting | | |
| Emergency External E | | mergency Push Button | |
| Canopy RAL Color | RAL 2000 | | |
| Baseframe RAL Col | RAL 9011 | | |
| Noise Pressure level @ 7m | | 84 dB(A)±3dB(A) | |
| | | | |

GENSET DIMENSIONS & WEIGHT

| GENSET TYPE | Length (mm) | Width (mm) | Height (mm) | Fuel Tank Capacity (L) | Dry Weight (kg) | Wet Weight (kg) |
|-------------|----------------|---------------|-------------|---------------------------|-----------------|-----------------|
| OPEN | 3500 | 2140 | 2385 | 1245 | 4995 | 5110 |
| CLOSE | 5205 | 1824 | 2817 | 1230 | 6388 | 6373 |

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



