

# PI 1250P

## **Industrial Generating Set**



| MODEL    | rpm / Hz  | VOLTAGE   | PRIME (1)         | STANDBY (2)         |
|----------|-----------|-----------|-------------------|---------------------|
| PI 1250P | 1500 / 50 | 400 / 230 | 1125 kVA / 900kWe | 1250 kVA / 1000 kWe |

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

| eam.<br>E <b>NGINE SPECIFIC<i>A</i></b>  | ATIONS                                     |   |  |  |
|--|--|---|--|--|
| Rated Output (PRP)   | 997 kW <sub>m</sub>                        |   |  |  |
| Rated Output (ESP)   | 1105 kW <sub>m</sub>                       |   |  |  |
| Engine Make & Mode   | Perkins 4008-30TAG3                        |   |  |  |
| No. of Cylinders   | 8 Vertical In-line                         |   |  |  |
| Cycle  | 4 Strokes                                  |   |  |  |
| Aspiration   | Turbocharged & Air to<br>Air Charge Cooled |   |  |  |
| Cooling Method   | Water                                      |   |  |  |
| Governing Type   | Electronic                                 |   |  |  |
| Governing Class  | G2 - ISO 8528 Part 1                       |   |  |  |
| Compression Ratio  | 13:1                                       |   |  |  |
| Displacement   | 30.56 L (1397.in <sup>3</sup> )            |   |  |  |
| BorexStroke (mm/in)  | 160x190 /6.3x7.5                           |   |  |  |
| Battery and Charger A  | 24 VDC , 55 Amp                            |   |  |  |
| AIR SYSTEM   |  |   |  |  |
| Air Filter Type  | Dry Element                                |   |  |  |
| Combustion Air Flow  | 84 m <sup>3</sup> /min                     |   |  |  |
| Combustion Air Flow  | (ESP)                                      | 96 m³/min                                   |  |  |
| Radiator Air Flow  |  | 1104 m³/min                                 |  |  |
| COOLING SYSTEM   |  |   |  |  |
| SOULING STSTEM   |  |   |  |  |
| Total Coolant Capac  |  | 100 L (26.4 US gal)                         |  |  |
|  |  | 100 L (26.4 US gal)  Centrifugal Eng-Driven |  |  |
| Total Coolant Capac  |  | , , ,                                       |  |  |
| Total Coolant Capac<br>Water Pump Type   | ity (L)                                    | Centrifugal Eng-Driven                      |  |  |
| Total Coolant Capac<br>Water Pump Type<br>Radiator Fan Load  | ity (L)                                    | Centrifugal Eng-Driven 50 kW                |  |  |
| Total Coolant Capac<br>Water Pump Type<br>Radiator Fan Load<br>Heat Radiation to Roc<br>Heat Radiation to Roc                      | om (PRP)                                   | Centrifugal Eng-Driven 50 kW 58 kW          |  |  |
| Total Coolant Capac<br>Water Pump Type<br>Radiator Fan Load<br>Heat Radiation to Roc<br>Heat Radiation to Roc                      | om (PRP) om (ESP)                          | Centrifugal Eng-Driven 50 kW 58 kW          |  |  |
| Total Coolant Capace Water Pump Type Radiator Fan Load Heat Radiation to Roo Heat Radiation to Roo LUBRICATION SYS                 | om (PRP) om (ESP)                          | Centrifugal Eng-Driven 50 kW 58 kW 74 kW    |  |  |
| Total Coolant Capace Water Pump Type Radiator Fan Load Heat Radiation to Roo Heat Radiation to Roo LUBRICATION SYS Oil Filter Type | om (PRP) om (ESP)                          | Centrifugal Eng-Driven 50 kW 58 kW 74 kW    |  |  |

| or other temperature and altitude limits ple   | ease consult application                                     |  |  |  |  |
|--|--|--|--|--|--|
| FUEL SYSTEM  |  |  |  |  |  |
| Fuel Filter: Full-flow spin-on fuel oil filters  |  |  |  |  |  |
| Recommended Fuel   | Class A2 Diesel  |  |  |  |  |
| Fuel Consumption Standby   | 269 L/hr (71 US gal/hr)                                      |  |  |  |  |
| Fuel Consumption 100% PRP  | 244 L/hr (64.5 US gal/hr)                                    |  |  |  |  |
| Fuel Consumption 75% PRP   | 188 L/hr (49.6 US gal/hr)                                    |  |  |  |  |
| Fuel Consumption 50% PRP   | 120 L/hr (31.7 US gal/hr)                                    |  |  |  |  |
| EXHAUST SYSTEM   |  |  |  |  |  |
| Muffler Type   | Residential Grade  |  |  |  |  |
| Max. Back Pressure   | 7 kPa  |  |  |  |  |
| Exhaust Gas Flow(PRP/ESP)  | 203/240 m <sup>3</sup> /min                                  |  |  |  |  |
| Exhaust Gas Temperature (PRP/ESP)  | 473°C/482°C  |  |  |  |  |
| ALTERNATOR SPECIFICAT  | ONS  |  |  |  |  |
| Rated Output (Prime) (1)   | 1250 KVA   |  |  |  |  |
| Rated Output (Standby) (2)   | 1375 kVA   |  |  |  |  |
| Alternator Make & Model  | Leroy somer LSA<br>50.2 M6                                   |  |  |  |  |
|  |  |  |  |  |  |
| Number of Poles  | 4  |  |  |  |  |
| Number of Poles  Number of Winding Leads   | 4<br>6 Leads / 12 lead<br>optional                           |  |  |  |  |
|  | 6 Leads / 12 lead  |  |  |  |  |
| Number of Winding Leads  | 6 Leads / 12 lead optional                                   |  |  |  |  |
| Number of Winding Leads  Type of Bearing   | 6 Leads / 12 lead optional Single                            |  |  |  |  |
| Number of Winding Leads  Type of Bearing  Insulation Class / Temp Rise   | 6 Leads / 12 lead optional Single H/H                        |  |  |  |  |
| Number of Winding Leads  Type of Bearing  Insulation Class / Temp Rise  Efficiency @ Rated Voltage   | 6 Leads / 12 lead optional Single H/H 95.3%                  |  |  |  |  |
| Number of Winding Leads  Type of Bearing Insulation Class / Temp Rise  Efficiency @ Rated Voltage Ingress Protection Rating  | 6 Leads / 12 lead optional Single H/H 95.3% IP 23            |  |  |  |  |
| Number of Winding Leads Type of Bearing Insulation Class / Temp Rise Efficiency @ Rated Voltage Ingress Protection Rating Excitation System  | 6 Leads / 12 lead optional Single H/H 95.3% IP 23 AREP / PMG |  |  |  |  |
| Number of Winding Leads  Type of Bearing  Insulation Class / Temp Rise  Efficiency @ Rated Voltage  Ingress Protection Rating  Excitation System  AVR Model D350                       | 6 Leads / 12 lead optional Single H/H 95.3% IP 23 AREP / PMG |  |  |  |  |
| Number of Winding Leads  Type of Bearing  Insulation Class / Temp Rise  Efficiency @ Rated Voltage  Ingress Protection Rating  Excitation System  AVR Model D350  ALTERNATOR OPERATING | 6 Leads / 12 lead optional Single H/H 95.3% IP 23 AREP / PMG |  |  |  |  |

Radio Interface

Cooling Air Flow

<sup>(2)</sup> 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.



Data Tolerance limit ± 5%

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

1.8 m³/sec

<sup>(1)</sup> **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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## **Industrial Generating Set**



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

| ENCLOSURE SPECIFICATIONS                 |  |  |  |  |  |
|--|--|--|--|--|--|
| tic & Weather Proof                      |  |  |  |  |  |
| Anticorrosive Protection                 |  |  |  |  |  |
| Polyester Powder Coated Galvanized Sheet |  |  |  |  |  |
| IP22                                     |  |  |  |  |  |
| ndard Lifting                            |  |  |  |  |  |
| Emergency Push Button                    |  |  |  |  |  |
| RAL 2000                                 |  |  |  |  |  |
| RAL 9011                                 |  |  |  |  |  |
| 87 dB(A)±3dB(A)                          |  |  |  |  |  |
|  |  |  |  |  |  |

## **GENSET DIMENSIONS & WEIGHT**

| GENSET TYPE | Length<br>(mm) | Width<br>(mm) | Height<br>(mm) | Fuel Tank<br>Capacity (L) | Dry Weight (kg) | Wet Weight (kg) |
|-------------|----------------|---------------|----------------|---------------------------|-----------------|-----------------|
| OPEN        | 4850           | 2295          | 2670           | 2480                      | 8850            | 9150            |
| CLOSE       | 6760           | 2190          | 3385           | 2020                      | 10500           | 10800           |

#### 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





