



| MODEL | rpm / Hz | VOLTAGE | PRIME ⁽¹⁾ | STANDBY ⁽²⁾ |
|---------|-----------|------------|----------------------|------------------------|
| PI 687Y | 1500 / 50 | 400 /230 V | 660kVA /528kWe | 730kVA / 584kWe |

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

ENGINE SPECIFICATIONS

| | |
|-----------------------------------|-----------------------------------|
| Rated Output (PRP) ⁽¹⁾ | 561 kW _m |
| Rated Output (ESP) ⁽²⁾ | 616 kW _m |
| Engine Make & Model | Yuchai YC6TD840-D31 |
| No. of Cylinders | 6 Vertical in-line |
| Cycle | 4 Strokes |
| Aspiration | Turbocharged, air-air intercooled |
| Cooling Method | Water |
| Governing Type | electronic governor |
| Governing Class | ISO 8528 G2 |
| Compression Ratio | 14:01 |
| Displacement | 19.6 L |
| BorexStroke (mm) | 152×180 mm |
| Battery and Charger Alternator | 24V |

AIR SYSTEM

| | |
|---------------------------|--------------------------|
| Air Filter Type | Dry-type, filter cartri |
| Combustion Air Flow (PRP) | 38.1 m ³ /min |
| Combustion Air Flow (ESP) | 40.5 m ³ /min |
| Radiator Air Flow | 1160 m ³ /min |

COOLING SYSTEM

| | |
|------------------------------|------------------------|
| Total Coolant Capacity (L) | 130.5 L |
| Water Pump Type | Centrifugal Eng-Driven |
| Radiator Fan Load | 20 kW |
| Heat Radiation to Room (PRP) | 38 kW |
| Heat Radiation to Room (ESP) | 52 kW |

LUBRICATION SYSTEM

| | |
|--------------------|--|
| Oil Filter | TBA |
| Total Oil Capacity | 55 L |
| Oil Pan | 52 L |
| Oil Type | 15W-40 in summer; 10W-30 or other environmentally suitable |

FUEL SYSTEM

| | |
|---------------------------|-----------------|
| Fuel Filter: | |
| Recommended Fuel | Class A2 Diesel |
| Fuel Consumption Standby | 163.8 L/hr |
| Fuel Consumption 100% PRP | 143.2 L/hr |
| Fuel Consumption 75% PRP | 103.8 L/hr |
| Fuel Consumption 50% PRP | 71.3 L/hr |

EXHAUST SYSTEM

| | |
|-----------------------------------|---------------------------------------|
| Muffler Type | Residential |
| Max. Back Pressure | 10 kPa |
| Exhaust Gas Flow (PRP/ESP) | 116.2 / 119 m ³ /min |
| Exhaust Gas Temperature (PRP/ESP) | 550 ⁰ C/550 ⁰ C |

ALTERNATOR SPECIFICATIONS

| | |
|------------------------------|--|
| Rated Output (Prime) (1) | 670 kVA / 660kVA |
| Rated Output (Standby) (2) | 738 kVA / 730kVA |
| Alternator Make & Model | Stamford HCI544F / LeroySomer TAL-A473-F |
| Number of Poles | 4 |
| Number of Winding Leads | 12 |
| Type of Bearing | Single |
| Insulation Class / Temp Rise | H/H |
| Efficiency @ Rated Voltage | 95% / 95% |
| Ingress Protection Rating | IP 23 |
| Excitation System | Self Excited |
| AVR Model | AS440 / R150 |

ALTERNATOR OPERATING DATA

| | |
|---------------------|--|
| Overspeed | 2250 r.p.m |
| Voltage Regulation | ± 1.0 % / ± 0.8 |
| Waveform distortion | NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0% |
| Radio Interface | BS EN 61000-6-2 & BS EN 61000-6-4, VDE 0875G, VDE 0875N |
| Cooling Air Flow | 1.035 m ³ /sec / 0.9 m ³ /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.



CONTROLLER SPECIFICATIONS

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

ENCLOSURE SPECIFICATIONS

| | |
|--|--------------------------------|
| Enclosure Type | Acoustic & Weather Proof |
| Anticorrosive Protection | |
| Polyester Powder Coated Galvanized Sheet | |
| Ingress Protection Rating | IP22 |
| Lifting | ISO Standard Lifting |
| Emergency | External Emergency Push Button |
| Canopy RAL Color | RAL 2000 |
| Baseframe RAL Color | RAL 9011 |
| Noise Pressure level @ 7m | 85 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 | 3650 | 2295 | 2630 | 1430 | 5875 | 5990 |
| CLOSE | 5873 | 2224 | 2817.8 | 1835 | 8815 | 9015 |

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.

Heavy 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 advanced Control system is designed to provide a comprehensive 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

Pre heating system

Static Battery Charger

Critical grade muffler

Electronic governor

Remote Annunciator

Application

Infrastructure, Industrial, Residential, Telecom,
Defense, Mining, Agriculture

