



| MODEL | rpm / Hz | VOLTAGE | PRIME ⁽¹⁾ | STANDBY ⁽²⁾ |
|----------|-----------|------------|----------------------|------------------------|
| PI 3000Y | 1500 / 50 | 400 /230 V | 2750kVA /2200kWe | 3000kVA / 2400kWe |

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⁾ | 2405 kW _m |
| Rated Output (ESP) ⁽²⁾ | 2646 kW _m |
| Engine Make & Model | Yuchai YC16VC3600-D31 |
| No. of Cylinders | 16 Vertical V-type |
| Cycle | 4 Strokes |
| Aspiration | Turbocharged, water- |
| Cooling Method | Water |
| Governing Type | electronic governor |
| Governing Class | ISO 8528 G2 |
| Compression Ratio | 13.5:1 |
| Displacement | 105.56 L |
| BorexStroke (mm) | 200×210 mm |
| Battery and Charger Alternator | 24V |

AIR SYSTEM

| | |
|---------------------------|-------------------------|
| Air Filter Type | Dry-type, filter cartri |
| Combustion Air Flow (PRP) | 220 m ³ /min |
| Combustion Air Flow (ESP) | 231 m ³ /min |
| Radiator Air Flow | 3600 m3/min |

COOLING SYSTEM

| | |
|------------------------------|------------------------|
| Total Coolant Capacity (L) | 850 L |
| Water Pump Type | Centrifugal Eng-Driven |
| Radiator Fan Load | 120 kW |
| Heat Radiation to Room (PRP) | 195 kW |
| Heat Radiation to Room (ESP) | 210 kW |

LUBRICATION SYSTEM

| | |
|--------------------|---|
| Oil Filter | TBA |
| Total Oil Capacity | 460 L |
| Oil Pan | 460 L |
| Oil Type | 15W-40 in summer; 10W-30 or other environmentally suitable diesel engine oils |

FUEL SYSTEM

| | |
|---------------------------|-----------------|
| Fuel Filter: | |
| Recommended Fuel | Class A2 Diesel |
| Fuel Consumption Standby | 681.6 L/hr |
| Fuel Consumption 100% PRP | 594.4 L/hr |
| Fuel Consumption 75% PRP | 416.4 L/hr |
| Fuel Consumption 50% PRP | 294.7 L/hr |

EXHAUST SYSTEM

| | |
|----------------------------------|---------------------------------------|
| Muffler Type | Residential |
| Max. Back Pressure | 10 kPa |
| Exhaust Gas Flow (PRP/ESP) | 506 / 553 m ³ /min |
| Exhaust Gas Temperature(PRP/ESP) | 550 ⁰ C/570 ⁰ C |

ALTERNATOR SPECIFICATIONS

| | |
|---------------------------------------|---|
| Rated Output (Prime) ⁽¹⁾ | 2790kVA / 2750kVA |
| Rated Output (Standby) ⁽²⁾ | 3070kVA / 3025kVA |
| Alternator Make & Model | Stamford LV 804 S LeroySomer LSA52.3UL16 |
| Number of Poles | 4 |
| Number of Winding Leads | 6 |
| Type of Bearing | Single |
| Insulation Class / Temp Rise | H/H |
| Efficiency @ Rated Voltage | 96% / 95.88% |
| Ingress Protection Rating | IP 23 |
| Excitation System | PMG / (AREP + PMI) |
| AVR Model | FULL WAVE RECTIFIED / D550 |

ALTERNATOR OPERATING DATA

| | |
|---------------------|--|
| Overspeed | 2250 r.p.m |
| Voltage Regulation | ± 0.25 % |
| Waveform distortion | NO LOAD (< 1.5% / <4%) NON-DISTORTING BALANCED LINEAR LOAD < 3.0% |
| Radio Interface | BS EN 50081/2-1/2 VDE 0875G VDE 0875N For other standards apply to the |
| Cooling Air Flow | 3.2 m ³ /sec / 2.5 m3/s |

⁽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 | IP23 |
| Lifting | ISO Standard Lifting |
| Emergency | External Emergency Push Button |
| Container RAL Color | RAL 9001 |
| Baseframe RAL Color | RAL 9011 |
| Noise Pressure level @ 7m | 87 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 | 7500 | 2850 | 3200 | N/A | TBA | TBA |
| CLOSE | 12m fabricated CONTAINER | | | N/A | TBA | TBA |

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

