

PI 3000Y

Industrial Generating Set



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 SPECIFICATION	NS
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-a
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 Alterna	itor 24V
AIR SYSTEM	
Air Filter Type	Dry-type, filter cartri
Combustion Air Flow (PRF	P) 220 m ³ /min
Combustion Air Flow (ESP	2) 231 m ³ /min
Combustion Air Flow (ESF Radiator Air Flow	2) 231 m³/min 3600 m3/min
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Radiator Air Flow	3600 m3/min
Radiator Air Flow COOLING SYSTEM	3600 m3/min
Radiator Air Flow COOLING SYSTEM Total Coolant Capacity (L)	3600 m3/min 850 L
Radiator Air Flow COOLING SYSTEM Total Coolant Capacity (L) Water Pump Type	3600 m3/min 850 L Centrifugal Eng-Driven 120 kW
Radiator Air Flow COOLING SYSTEM Total Coolant Capacity (L) Water Pump Type Radiator Fan Load	3600 m3/min 850 L Centrifugal Eng-Driven 120 kW RP) 195 kW
Radiator Air Flow COOLING SYSTEM Total Coolant Capacity (L) Water Pump Type Radiator Fan Load Heat Radiation to Room (PF	3600 m3/min 850 L Centrifugal Eng-Driven 120 kW RP) 195 kW
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Radiator Air Flow COOLING SYSTEM Total Coolant Capacity (L) Water Pump Type Radiator Fan Load Heat Radiation to Room (PF) Heat Radiation to Room (ES) LUBRICATION SYSTEM	3600 m3/min 850 L Centrifugal Eng-Driven 120 kW RP) 195 kW SP) 210 kW
Radiator Air Flow COOLING SYSTEM Total Coolant Capacity (L) Water Pump Type Radiator Fan Load Heat Radiation to Room (PF) Heat Radiation to Room (ES) LUBRICATION SYSTEM Oil Filter Total Oil Capacity Oil Pan	3600 m3/min 850 L Centrifugal Eng-Driven 120 kW 195 kW SP) 210 kW

FUEL SYSTEM			
Fuel Filter:			
Recommended Fue	Class A2 Diesel		
Fuel Consumption S	681.6 L/hr		
Fuel Consumption 10	594.4 L/hr		
Fuel Consumption 75	416.4 L/hr		
Fuel Consumption 50	294.7 L/hr		
EXHAUST SYSTE	VI		
Muffler Type		Residential	
Max. Back Pressure)	10 kPa	
Exhaust Gas Flow (PRP/ESP)		506 / 553 m ³ /min	
Exhaust Gas Temperature(PRP/E	550°C/570°C		
ALTERNATOR SP	ECIFICAT	IONS	
Rated Output (Prime	e) ⁽¹⁾	2790kVA / 2750kVA	
Rated Output (Stand	dby) ⁽²⁾	3070kVA / 3025kVA	
Alternator Make & N	/lodel	Stamford LV 804 S LeroySomer LSA52.3UL16	
Number of Poles		4	
Number of Winding	Leads	6	
Type of Bearing		Single	
Insulation Class / Tel	mp Rise	H/H	
Efficiency @ Rated	Voltage	96% / 95.88%	
Ingress Protection Rating		IP 23	
Excitation System		PMG / (AREP + PMI)	
AVR Model	FULL WA	VE RECTIFIED / D550	
ALTERNATOR OP	ERATING	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	81/2-1/2 VDE 0875G VDE other standards apply to the		
Cooling Air Flow	3.2 m³/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.





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CONTROLLER SPECIFICATIONS Controller Make & Model DeepSea 6120 MKII Operation Mode MRS / AMF (optional) Display Graphic Back-lit LCD (128x64) pixles Ingress Protection Rating IP65 8/6 Binary Inputs/Outputs 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 Rating		IP23		
Lifting	ISO Standard Lifting			
Emergency External E		mergency Push Botton		
Container RAL Colo	RAL 9001			
Baseframe RAL Col	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	12000	2900	3450	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.

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

Pre heating system

Static Battery Charger

Critical grade muffler

Electronic governor

Remote Annunciator

Application

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



