

PI 3125C / PI 3438C



Industrial Generating Set

MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 3125C / PI 3438C	1800 / 60	480 / 277	3125 kVA / 2500 kWe	3438 kVA / 2750 kWe

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

Rated Output (PRP)	\ (1)	2737 kW _m	
Rated Output (FKF)	3028 kW _m		
Engine Make & Mod	Cummins QSK78-G8		
No. of Cylinders	18 Cylinder, Vee Type		
	4 Strokes		
-	Cycle		
Aspiration		Aftercooled	
Cooling Method		Water	
Governing Type		Electronic	
Governing Class	Governing Class		
Compression Ratio	15.5 : 1.0		
Displacement		77.6 L / 4735 in ³	
Bore/Stroke (mm / ir	1)	(170/190) / (6.69/7.48)	
Electrical Starting Sys	stem	24 VDC starter motor	
AIR SYSTEM			
Air Filter Type	Air Filter Type		
Combustion Air Flox	w (PRP)	225.36 m ³ /min	
Combustion Air Flor	236.58 m ³ /min		
Radiator Air Flow	TBD		
COOLING SYSTEM			
Total Coolant Capa	city	166.6 L / 176 US qts	
Water Pump Type		Centrifugal Eng-Driven	
Radiator Fan Load		TBD	
Heat Radiation to Ro	Heat Radiation to Room (PRP)		
Heat Radiation to Ro	282 kW		
LUBRICATION SYSTEM			
Oil Filter Type Spin on full flow filter			
Total Oil Capacity	I	465.0 L /123.0 US gal.	
Oil Pan	Oil Pan		
Oil Type	412.6 L /109.0 US gal. CI4; SAE 15W-40		
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Fuel Filter: Spin on full flow filter with water separator			
Recommended Fuel	Class A2 Diesel		
Fuel Consumption Standby	701.0 L/hr / 185.3 US gal/hr		
Fuel Consumption 100% PRP	634.0 L/hr / 167.6 US gal/hr		
Fuel Consumption 75% PRP	500.0 L/hr / 132.1 US gal/hr		
Fuel Consumption 50% PRP	352.0 L/hr / 93.0 US gal/hr		
EXHAUST SYSTEM			
Muffler Type	Residential Grade		
Max. Back Pressure	7.0 kPa		
Exhaust Gas Flow (PRP/ESP)	517.14 / 555 m³/min		
Exhaust Gas Temperature (PRP/ESP) 435 / 452 °C			
ALTERNATOR SPECIFICATIONS			
Rated Output (Prime) (1)	3350.0 kVA		
Rated Output (Stand by) (2)	3685 .0 kVA		
Alternator Make & Model	Stamford LV 804 S		
Number of Dolos	4		

Number of Poles	4		
Number of Winding L	6		
Type of Bearing	Type of Bearing		
Insulation Class / Temp	Insulation Class / Temp Rise		
Efficiency		95.9%	
Ingress Protection Ra	Ingress Protection Rating		
Excitation System	Separately Excited by P.M.G		
AVR Model Stamfor		⁻ d - MA330	
ALTERNATOR OPE	DATA		
Overspeed		2250 r.p.m	
Voltage Regulation			
Voltage Regulation		± 0.5 %	
Voltage Regulation Wafeform distortion		± 0.5 % No load <1.5% Linear load <3%	
	Standa	No load <1.5%	

⁽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 7320 MKII	
Operation Mode		Auto Main Failure (AMF)	
Display Graphic Back		-lit LCD (128x64) pixles	
Ingress Protection Rating		IP65	
Binary Inputs/Outputs		8 / 6	
Analog Inputs		6	
Measurement	Vac, A, Hz, kVA, kVAR, kW, kWh, Vdc		
Event Log	Alarms lo	g, Hrs log	
Communication USB		, RS232, RS485	

ENCLOSURE SPECIFICATIONS

Enclosure Type	Acoustic & Weather Proof		
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection	IP23		
Lifting	Lifting ISO Star		
Emergency	Emergency External E		
Canopy RAL Color		RAL 2000	
Baseframe RAL Color		RAL 9011	
Noise Pressure level @ 7m		90 dB(A)	

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	7300	2750	3600	-	24000	24100
CLOSE	12000	3600	4780	-	36000	36100

Note: Dimensions are for priliminary guidance, Please refer to GA drawing

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.

Industrial 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

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Application

Infrastructure, Industrial, Residential, Telecom, Defence, Mining, Agriculture,

