

PI 225C/ PI 250C

Industrial Generating Set



MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 250C	1800 / 60	480 / 277	225.0 kVA / 180.0 kWe	250.0 kVA / 200.0 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	208 kW _m		
Rated Output (ESP)	242 kW _m		
Engine Make & Mod	Cummins QSB7-G5		
No. of Cylinders	6 Vertical In-line		
Cycle	4 Strokes		
Aspiration	Turbocharged and Air to Air Aftercooled		
Cooling Method	Water		
Governing Type	Governing Type		
Governing Class		G2 - ISO 8528 Part 1	
Compression Ratio	17.2 : 1		
Displacement	Displacement		
Bore/Stroke (mm / ii	(107/124) / (4.21/4.88)		
Battery and Charger	12 VDC, 100 Amp		
AIR SYSTEM			
Air Filter Type	Dry Element		
Combustion Air Flor	Combustion Air Flow (PRP)		
Combustion Air Flor	Combustion Air Flow (ESP)		
Radiator Air Flow		379.2 m ³ /min	
COOLING SYSTEM			
Total Coolant Capa	city	10.2 L / 2.7 US gal	
Water Pump Type	Water Pump Type		
Radiator Fan Load		12.7 kW	
Radiator Fan Load Heat Radiation to Ro	oom (PRP)	12.7 kW 21 Kw	
Heat Radiation to Ro	oom (ESP)	21 Kw	
Heat Radiation to Ro	oom (ESP)	21 Kw	
Heat Radiation to Ro Heat Radiation to Ro LUBRICATION SY	oom (ESP)	21 Kw 24 kW	
Heat Radiation to Ro Heat Radiation to Ro LUBRICATION SY Oil Filter Type	oom (ESP)	21 Kw 24 kW on full flow filter	

Fuel Filter: Spin on full flow filter with water separator				
Recommended Fuel	Class A2 Diesel			
Fuel Consumption Star	59.0 L/hr / 15.5 US gal/hr			
Fuel Consumption 100%	50.0 L/hr / 13.3 US gal/hr			
Fuel Consumption 75%	40.0 L/hr / 10.6 US gal/hr			
Fuel Consumption 50%	30.0 L/hr / 7.8 US gal/hr			
EXHAUST SYSTEM				
Muffler Type	Residential grade			
Max. Back Pressure		10.2 kPa		
Exhaust Gas Flow (PRP/ESP)		38.04 / 43.92 m ³ /min		
Exhaust Gas Temperature (PRP/ESP) 487/532 °C				
ALTERNATOR SPECIFICATIONS				
Rated Output (Prime) (1)		255.0 kVA		
Rated Output (Stand by) (2)		280.0 kVA		
Alternator Make & Mod	Stamford UCI274H			
Number of Poles	4			
Number of Winding Lea	12			
Type of Bearing		Single		
Insulation Class / Temp	Rise	H/H		
Efficiency		93.3%		
Ingress Protection Rating		IP 23		
Excitation System		Self Excited		
AVR Model Stamford - AS440				
ALTERNATOR OPERATING DATA				
Overspeed		2250 r.p.m		
Voltage Regulation		± 1.0 %		
Wafeform distortion		No load <1.5% Linear load <5%		
Radio Interface	Standa	rd EN61000-6-2:2001		
Cooling Air Flow		0.617 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.





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CONTROLLER SPECIFICATIONS

Controller Make & N	DeepSea 6120		
Operation Mode	MRS / AMF (optional)		
Display Graphic Back		-lit LCD (128x64) pixles	
Ingress Protection F	IP65		
Binary Inputs/Outpu	8 / 6		
Analog Inputs	4		
Measurement	Vac, A, H	z, kVA, kW, Vdc	
Event Log Alarms log		g, 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 Butt		
Canopy RAL Color	RAL 2000		
Baseframe RAL Co	RAL 9011		
Noise Pressure level @ 7m		75.2 dB(A)	

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	2610	1265	1715	530	1685	1710
CLOSE	3894	1355	2207	543	2100	2150

Note: Removable breaker box is not considered in open type dimensions.

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, Defence, Mining, Agriculture,

