

PI 1819C / PI 2000C

Industrial Generating Set



Rev-1

MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 1819C / PI 2000C	1800 / 60	400 / 230	1819 kVA / 1455 kWe	2000 kVA / 1600 kWe

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

ENGINE SPECIFICA	ENGINE SPECIFICATIONS			
Rated Output (PRP)	1575 kW _m			
Rated Output (ESP)	1750 kW _m			
Engine Make & Mod	Cummins QSK50-G6			
No. of Cylinders	16 Cylinder, Vee Type			
Cycle	4 Strokes			
Aspiration	Turbocharged and Aftercooled			
Cooling Method	Water			
Governing Type		Electronic		
Governing Class		G2 - ISO 8528 Part 1		
Compression Ratio				
Displacement		50.3 L / 3067 in ³		
Bore/Stroke (mm / in	Bore/Stroke (mm / in)			
Battery and Charger A	Alternator	24 VDC starter motor		
AIR SYSTEM				
Air Filter Type		Dry Element		
Combustion Air Flow	v (PRP)	132.42 m ³ /min		
0 1 " 1" -				
Combustion Air Flow	/ (ESP)	135.3 m ³ /min		
Combustion Air Flow Radiator Air Flow	v (ESP)	135.3 m ³ /min		
	,			
Radiator Air Flow				
Radiator Air Flow COOLING SYSTEM		TBD		
Radiator Air Flow COOLING SYSTEM Total Coolant Capac		TBD 140.1 L		
Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type	bity	TBD 140.1 L Centrifugal Eng-Driven		
Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load	city Dom (PRP)	TBD 140.1 L Centrifugal Eng-Driven TBD		
Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Roc	om (PRP)	TBD 140.1 L Centrifugal Eng-Driven TBD 158 KW		
Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Roc Heat Radiation to Roc	om (PRP) om (ESP)	TBD 140.1 L Centrifugal Eng-Driven TBD 158 KW		
Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Roc Heat Radiation to Roc LUBRICATION SYS	om (PRP) om (ESP)	TBD 140.1 L Centrifugal Eng-Driven TBD 158 Kw 173 kW		
Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Roc Heat Radiation to Roc LUBRICATION SYS Oil Filter Type	om (PRP) om (ESP)	TBD 140.1 L Centrifugal Eng-Driven TBD 158 KW 173 kW		

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FUEL SYSTEM				
Fuel Filter: Spin on full flow filter with water separator				
Recommended Fuel	Class A2	Diesel		
Fuel Consumption Sta	431.0 L/hr/1	13.8 US gal/hr		
Fuel Consumption 100	392.0 L/hr/103.5 US gal/hr			
Fuel Consumption 75%	303.0 L/hr / 80.0 US gal/hr			
Fuel Consumption 50%	224.0 L/hr / 59.1 US gal/hr			
EXHAUST SYSTEM				
Muffler Type	Residential Grade			
Max. Back Pressure	6.8 kPa			
Exhaust Gas Flow (PR	P/ESP)	328.62 / 3	348.18 m ³ /min	
Exhaust Gas Tempe	erature (P	RP/ESP)	488 / 518 °C	
ALTERNATOR SPECIFICATIONS				
Rated Output (Prime)	2187 Kva			
Rated Output (Stand	2269 kVA			
Alternator Make & Mo	Stamford S7L1D-F41 Wdg13			
Number of Poles		4		
Number of Winding L	eads	12		
Type of Bearing		Single		
Insulation Class / Temp	p Rise	Н/Н		
Efficiency		95.9%		
Ingress Protection Ra	IP 23			
Excitation System	Separately Ex	cited by P.M.G		
AVR Model	rd - MX341			
ALTERNATOR OPE	RATING	DATA		
Overspeed		2250 r.p.r	n	
Voltage Regulation		± 1.0 %		
Wafeform distortion	No load <1.5% Linear load <5%			
Radio Interface	Standa	rd EN61000	-6-2:2001	
0 " 1 5		2.		

⁽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

Cooling Air Flow

⁽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.



3.02 m³/sec

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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 Rating		IP65	
Binary Inputs/Outpu	8/6		
Analog Inputs	4		
Measurement	Vac, A, H	z, kVA, kW, Vdc	
Event Log Alarms lo		g, Hrs log	
Communication		USB	

ENCLOSURE SPECIFICATIONS			
Enclosure Type	c & Weather Proof		
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection F	Ingress Protection Rating		
Lifting	Lifting ISO Star		
Emergency External E		mergency Push Button	
Canopy RAL Color		RAL 2000	
Baseframe RAL Color		RAL 9011	
Noise Pressure level @ 7m		88 dB(A)	

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	6000	2520	3380	-	13300	13650
CLOSE	12000	3600	4780	-	26900	26980

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

PRECISION INDUSTRIES

Application

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



