

PI 275Y

Industrial Generating Set

MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI275Y	1500 / 50	400 /230 V	250kVA / 200kWe	275kVA / 220kWe

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

eam. ENGINE SPECIFIC	ATIONS		
Rated Output (PRP) (1) 235 kW _m			
Rated Output (ESP)	259 kW _m		
Engine Make & Mod	Yuchai YC6MK360L-D20		
No. of Cylinders	6 Vertical In-line		
Cycle	4 Strokes		
Aspiration		Turbocharged, air-air intercooled	
Cooling Method		Water	
Governing Type		Electronic governo	
Governing Class		G2 - ISO 8528 Part 1	
Compression Ratio		16.8:1	
Displacement		10.34 L	
BorexStroke (mm)	123 x 145		
Battery and Charger Alternator		24 VDC, 35 Amp	
AIR SYSTEM			
Air Filter Type	Dry Element		
Combustion Air Flow (PRP)		15.3 m ³ /min	
Combustion Air Flow	v (ESP)	16.0 m ³ /min	
Radiator Air Flow		612 m³/min	
COOLING SYSTEM	Л		
Total Coolant Capac	city (L)	65 L (17.2 US gal)	
Water Pump Type		Centrifugal Eng-Driven	
Radiator Fan Load	11 kW		
Heat Radiation to Ro	10 kW		
Heat Radiation to Ro	12 kW		
LUBRICATION SYSTEM			
Oil Filter Type	Oil Filter Type Spin		
Total Oil Capacity		30 L (7.93 US gal)	
Oil Pan		28 L (7.4 US gal)	
Oil Type	CI4; SAE 15W-40		

FUEL SYSTEM Fuel Filter: Split element fuel filter			
Recommended Fuel	Class A2 Diesel		
Fuel Consumption Stand			
Fuel Consumption 100%			
Fuel Consumption 75% P	RP 42.7 L/hr (11.28 US gal/		
Fuel Consumption 50% P	RP 28.8 L/hr (7.6 US gal/hr)		
EXHAUST SYSTEM			
Muffler Type	Residential		
Max. Back Pressure	10 kPa		
Exhaust Gas Flow (PRP/E	ESP) 38 / 39.5 m ³ /min		
Exhaust Gas Temperature(PRP/ESP)	550°C/550°C		
ALTERNATOR SPECIFICATIONS			
Rated Output (Prime) (1)	250 kVA / 250kVA		
Rated Output (Standby)	⁽²⁾ 275 kVA / 275KVA		
Alternator Make & Mode	Stamford UCDI274K / LeroySomer TAL-A46-D		
Number of Poles	4		
Number of Winding Lead	ds 12 / 6 or 12		
Type of Bearing	Single		
Insulation Class / Temp R	Rise H/H		
Efficiency @ Rated Volta	age 92.7% / 91.3%		
Ingress Protection Rating	g IP 23		
Excitation System	Self Excited		
AVR Model AS	S440 / R150		
ALTERNATOR OPERA	ATING DATA		
Overspeed	2250 r.p.m		
Voltage Regulation	± 1.0 %		
Waveform distortion	NO LOAD (< 1.5% / <3.5%) NON-DISTORTING BALANCED LINEAR LOAD < 5.0%		
Radio Interface BS	S EN 61000-6-2 & BS EN 6100		
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⁽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.



Data Tolerance limit ± 5%

0.58 m³/sec



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CONTROLLER SPECIFICATIONS			
Controller Make & N	DeepSea 6120 MKII		
Operation Mode	MRS / AMF (optional)		
Display Graphic Back		x-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 lo		g, Hrs log	
Communication	USB		

ENCLOSURE SPECIFICATIONS			
Enclosure Type	c & Weather Proof		
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection Rating IP22			
Lifting	Lifting ISO Star		
Emergency External E		mergency Push Botton	
Canopy RAL Color		RAL 2000	
Baseframe RAL Color		RAL 9011	
Noise Pressure level @ 7m		78 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	3110	1450	1850	680	2660	2755
CLOSE	4380	1580	2235	760	3755	3850

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



