



# Genset Model PR450L



## POWER RATING

		50 Hz	Prime power	503 KVA	403 KW	1500 RPM	400 Volts	3 phase, 4 wire
		Stand By Power		553 KVA	443 KW	1500 RPM	400 Volts	3 phase, 4 wire
		60 Hz	Prime power	637 KVA	509 KW	1800 RPM	400 Volts	3 phase, 4 wire
*	Above ratings are based on conditions equivalent to those specified in ISO 3046/1, ISO 8528/1 and BS 5514/1. For other conditions and voltages consult IMPAC sales office.							

## THE BASIC PACKAGE

### GENERATING SET BUILD

Diesel generating set consists of an engine & alternator mono block unit mounted on a rigid steel base frame with anti vibration mounts and in built fuel tank sufficient for 6-8 hours of operation.

### ALTERNATOR

Brushless, self excited, self regulating, Class H drip proof alternator, conforms to main international standards and regulations: IEC60034, NEMA MG 1.22, ISO 8528 etc.

### GENERATOR CONTROL PANEL

Fully instrumented output panel, with state of the art generator control module having Low Oil Pressure, High Engine Temperature and Over/Under Frequency protections as standard.

### ENGINE

Generating Set is powered by world renowned, 4 stroke, naturally aspirated Turbocharged and water cooled Perkins Engine.

### COUPLING

Engine & alternator are coupled through flexible disc coupling on rigid base frame.

### FUEL SYSTEM

Rotary fuel injection pump, mechanical/electronic governing confirms to ISO8528-5: 1993 (E), Class G2, ISO 046-4M3, spin-on full flow fuel oil and pre-filter, cold start aid.

### LUBRICATING SYSTEM

Forced lubrication system with flat bottomed aluminum sump, spin-on full flow oil filters & oil cooler.

### COOLING SYSTEM

Thermostat controlled cooling system with gear driven water pump, fan drive with pusher fan, radiator and piping and fan guard.

### STARTING SYSTEM

Electrical manual starting system is supplied as standard, with option to auto starts that includes maintenance free lead acid battery, battery rack and leads and engine driven battery charger.

### TESTING & QUALITY CONTROL

Equipment is 100% tested at all stages to ensure quality and reliability of the product.

# Technical Data

## ENGINE

Make	Perkins	
Model	2806c-e14tag2	
Cylinders	6	
Cycle	4-stroke	
Bore & Stroke	140 Mm X 171 Mm	
Compression Ratio	15.8:1	
Induction System	Turbo Charged	
Combustion System	Indirect Injection	
Cooling System	Water Cooled	
Displacement	15.8 Liters	
Lube Oil Capacity	68 Liters	
Coolant Capacity	50 Liters	
Governor	Electronic	
Speed (Rpm)	1500	1800
Fuel Consumption	(Litres/hour)	
prime Power At 100%	104.9	134.1
Prime Power At 75%	79.2	96
Prime Power At 50%	54.2	69.9
Electric System	24 VDC	

## ALTERNATOR

Make	Leroy Somer	
Model	LSA 47.2 M7	
Regulation	$\pm 0.5\%$	
Efficiency	95% At Full Load	
Enclosure Protection	IP 23	
Insulation Class	H	
Terminals	12	
Frequency (Hz)	50	60
Coolant Air Flow	0.9 m³/s	
Short Circuit Current	300 %	

## \* RATING DEFINITIONS

Prime Power: Power available at variable load with a load factor not exceeding 80% of the prime power rating. Overload of 10% permitted for 1 hour during every 12 hour operation.

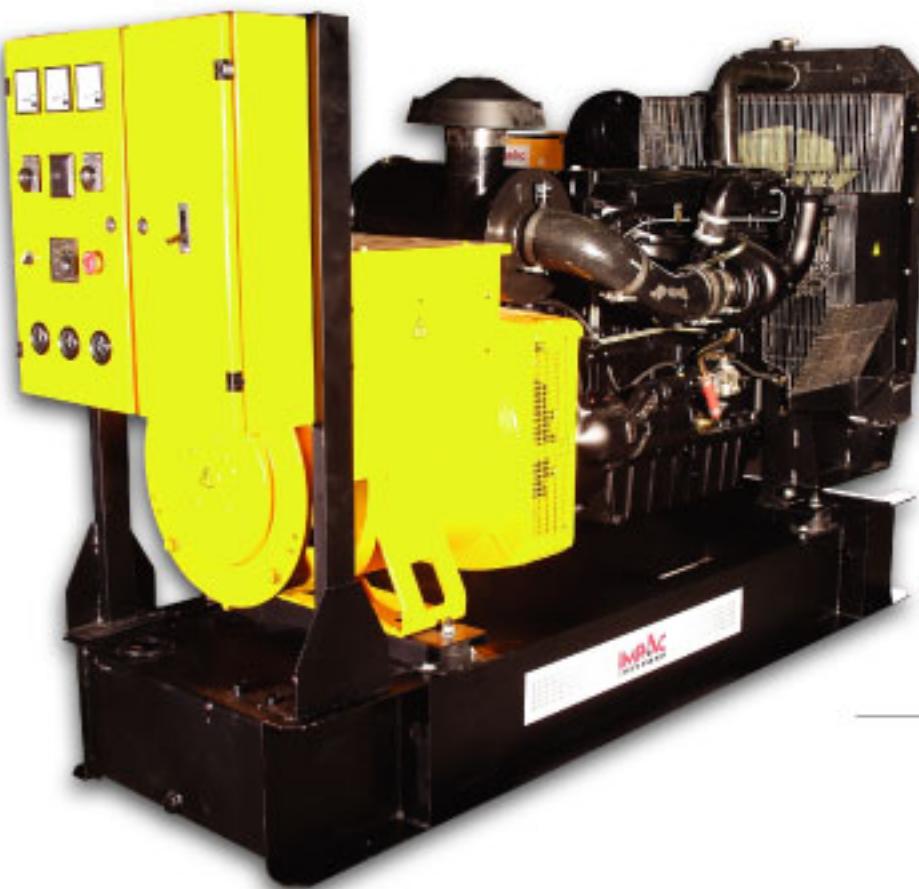
Stand By Power: Power available at variable load in the event of Mains power failure up to a max of 500 hrs per year of which up to 300 hrs may be continuous. No overload is permitted.

## SHIPPING

Length	3100mm
Width	1410mm
Height	1725mm
Net Weight	3485kg

## OPTIONS

- Auto start with auto transfer switch panel.
- Manual over-ride system.
- Extra fuel storage tanks
- Acoustic & weather canopies
- Multi sets Synchronizing system
- Road towing two / four wheeler trailer mounted sets



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