

## POWER RATING

50 Hz	Prime power	27 KVA	21.6 KW	1500 RPM	400 Volts	3 phase, 4 wire
	Stand By Power	29.7 KVA	23.76 KW	1500 RPM	400 Volts	3 phase, 4 wire
60 Hz	Prime power	34.9 KVA	27.9 KW	1800 RPM	400 Volts	3 phase, 4 wire
	Stand By Power	38.2 KVA	30.6 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 conforms 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

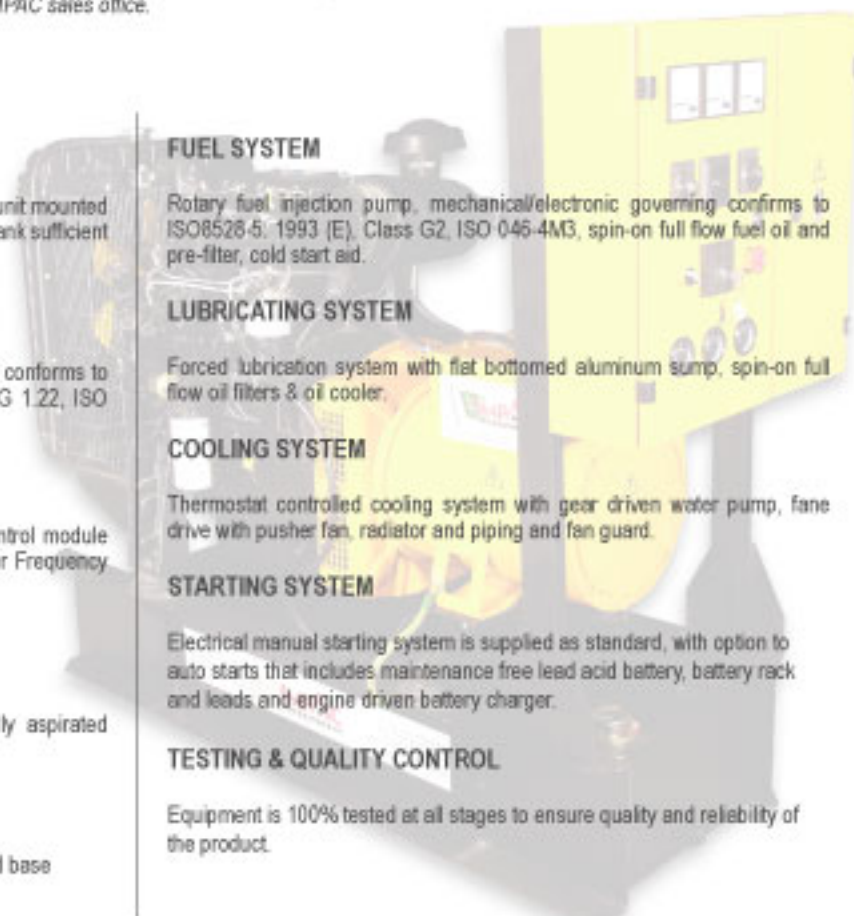
Thermostat controlled cooling system with gear driven water pump, fan drive with pusher fan, radiator and piping and fan guard.

### 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	1103a-33g	
Cylinders	3	
Cycle	4-stroke	
Bore & Stroke	105 Mm X 127 Mm	
Compression Ratio	19.25:1	
Induction System	Natural Aspiration	
Combustion System	Indirect Injection	
Cooling System	Water Cooled	
Displacement	3.3 Liters	
Lube Oil Capacity	7.9 Liters	
Coolant Capacity	10.2 Liters	
Governor	Mechanical	
Speed (Rpm)	1500	1800
Fuel Consumption	(Litres/hour)	
Prime Power At 100%	7.1	8.6
Prime Power At 75%	5.4	6.6
Prime Power At 50%	3.9	4.9
Electric System	12 V DC	

## ALTERNATOR

Make	Leroy Somer	
Model	LSA 42.2 M7	
Regulation	± 0.5 %	
Efficiency	95% At Full Load	
Enclosure Protection	IP 23	
Insulation Class	H	
Terminals	12	
Frequency (Hz)	50	60
Coolant Air Flow	0.15 m <sup>3</sup> /s	
Short Circuit Current	300 %	

## SHIPPING

Length	1750mm
Width	560mm
Height	1440mm
Net Weight	630kg

## \* 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.



## 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

# IEC

The Imperial Electric Company (Pvt) Ltd.

National Towers,  
26 - Egerton Road,  
Lahore - 54000 (Pakistan)  
Phone: +92 - 42 - 630 4881  
Fax: +92 - 42 - 630 4886  
Email: pgsales@iec.com.pk  
URL: www.iec.com