

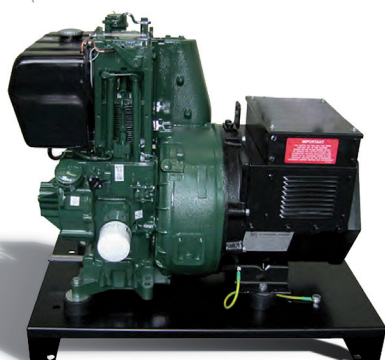
# LHV Village Gensets

LHV6 \*, LHV13 \*, LHV20 | Meccalte alternator

50 Hz, 1500r/min | 60 Hz, 1800r/min

4.4 - 20.2 kVA | 5.4 - 24.9 kVA

Village Genset



## BASIC CHARACTERISTICS

- 50 Hz, 1500 r/min or 60 Hz 1800 r/min
- diesel fuelled and approved for operation on biodiesel, that conforms with ASTM D6751 and EN14214, concentrations of up to 20%
- Lister Petter T series air cooled, direct injection, naturally aspirated diesel engine (1, 2 or 3 cylinders)
- hand start
- designed for continuous operation up to 40°C (104°F)

\* LHV6 and LHV13 - Please refer to Applications Department for cyclic irregularity implications.

## Note:

These gensets do not comply with Harmonised International Regulated Emissions Limits. LHV gensets do not comply with noise directive 2000/14/EC.

## STANDARD FEATURES

- Lister Petter T series, air cooled, naturally aspirated, direct injection diesel engine
- handle starting (not anti-kick-back)
- single bearing, 4-pole brushless alternator
- mechanical regulation
- flywheel mounted cooling fan
- folded steel baseplate painted black
- 13.5 litre engine mounted fuel tank
- engine mounted industrial silencer
- anti vibration mountings
- electrical diagrams
- operators' handbook
- medium duty dry type air cleaner

## OPTIONAL ITEM

- basic tool kit

## ENGINE SPECIFICATION

- Lister Petter TR1, TR2 or TR3 engine
- medium duty dry-type air cleaner
- starting handle
- oil and fuel filters
- decompressor levers
- engine stop lever

## ALTERNATOR SPECIFICATION

- single-bearing, 4-pole brushless alternator
- solid state AVR with  $\pm 1.5\%$  voltage regulation as standard
- class "H" insulation on the rotor and stator
- IP23 protection class

**POWER OUTPUTS<sup>3</sup> | UNREGULATED EMISSIONS RATINGS**

			50Hz				60Hz			
Model	Engine	Rating	1500 r/min				1800 r/min			
			Single phase		Three Phase		Single phase		Three Phase	
			220V*	230V*	380/220V*	400/230V*	220 or 110V*	230 or 115V*	220/127V*	230/133V*
			240V*		415/240V*		240 or 120V*			
			kVA	kW	kVA	kW	kVA	kW	kVA	kW
LHV 6	TR1	COP <sup>3</sup>	4.4	4.4	5.9	4.7	5.4	5.4	7.3	5.8
		PRP <sup>1</sup>	4.6	4.6	6.2	5.0	5.7	5.7	7.6	6.1
		ESP <sup>2</sup>	4.8	4.8	6.5	5.2	5.9	5.9	8.0	6.4
LHV 13	TR2	COP <sup>3</sup>	8.9	8.9	11.9	9.5	10.7	10.7	14.4	11.5
		PRP <sup>1</sup>	9.4	9.4	12.5	10.0	11.3	11.3	15.1	12.1
		ESP <sup>2</sup>	9.8	9.8	13.1	10.5	11.8	11.8	15.8	12.6
LHV 20	TR3	COP <sup>3</sup>	13.8	13.8	18.4	14.7	16.9	16.9	22.6	18.1
		PRP <sup>1</sup>	14.5	14.5	19.3	15.4	17.7	17.7	23.7	18.9
		ESP <sup>2</sup>	15.2	15.2	20.2	16.2	18.5	18.5	24.9	19.9

**APPROXIMATE FUEL CONSUMPTION**

			50 Hz		60 Hz	
Genset	Engine	Load	1500 r/min		1800 r/min	
			g/kWh	l/h	g/kWh	l/h
LHV 6	TR1	100%	229	1.5	238	1.9
		75%	224	1.1	234	1.4
LHV 13	TR2	100%	237	3.1	237	3.7
		75%	234	2.3	239	2.8
LHV 20	TR3	100%	230	4.6	229	5.5
		75%	233	3.5	227	4.1

**Note:**

Power outputs are based on Meccalte alternators, ratings may differ. Power Factor (pf); single phase 1.0 pf; three phase 0.8 pf.

\* Other voltages are available on request

**RATING DEFINITIONS  
TO ISO 8528-1****Standard Reference Conditions**

A Lister Petter generating set is designed to operate in the following ISO 3046 environmental reference conditions.

Barometric pressure 100 kPa

Relative humidity 30%

Ambient air temperature at the inlet manifold 25°C

**1. Prime Power (PRP)**

This rating is for the supply of 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 of operation shall not exceed 70 % of the PRP unless otherwise agreed by Lister Petter Power Systems Limited.

**2. Emergency Standby Power (ESP)**

Emergency standby power is defined as the maximum power available during a variable electrical power sequence, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hours of operation per year.

The permissible average power output over 24 hours of operation shall not exceed 70% of the ESP unless otherwise agreed by Lister Petter Power Systems Limited. The actual average power output shall be below or equal to the permissible average power output as defined for ESP. The above ratings are subject to the following ISO 3046 standard operating conditions, the use of fuel to BS EN 590 Class A1 or A2, lubricating oils of the correct performance specification and viscosity classification and that the maintenance intervals and procedures are carried out as prescribed by Lister Petter Power Systems Limited.

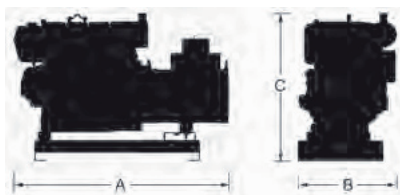
**3. Continuous Power (COP)**

This rating is for the supply of a constant load for an unlimited number of hours annually.

**Derating**

For non-standard site conditions, reference should be made to relevant BS, ISO & DIN standards.

## APPROXIMATE DIMENSIONS AND WEIGHT



		LHV 6	LHV 13	LHV 20
Dry weight	kg	358	428	518
	lb	789	943	1142
Length (A)	mm	971	1026	1251
	in	38.2	40.4	49.3
Width (B)	mm	715	715	715
	in	28.1	28.1	28.1
Height (C)	mm	1020	1020	1020
	in	40.2	40.2	40.2

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