LDS Technologies Ltd.

UK MANUFACTURED GENERATORS

LDS TECHNOLOGIES MODEL: LDS225P - LDS300P

PERKINS 1500 SERIES TECHNICAL DATA SHEET

Cost Effective Power:

Compact size and low noise level Lower fuel consumption and oil use 500hrs service intervals 2 year warranty (hours limitation applies)





LDS Technologies	Perkins	380-415 50hz		480v 60hz	
Generating Set Model	Engine Model	KVA	KW	KVA	KW
LDS225P/230P (PRIME)	1506A-E88TAG2	225/230	180/184	245	196
LDS225P/230P (STANDBY)	1506A-E88TAG2	250/253	200/202	269	215
LDS250P (PRIME)	1506A-E88TAG3	250	200	281	225
LDS250P (STANDBY)	1506A-E88TAG3	275	220	313	250
LDS300P (PRIME)	1506A-E88TAG5	300	240	338	270
LDS300P (STANDBY)	1506A-E88TAG5	330	264	375	300

RATING DEFINITIONS

Prime Power

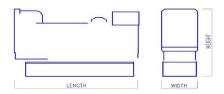
These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and these models can supply 10% overload power for 1 hour in 12 hours.

Standby Power

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

DIMENSIONS AND WEIGHTS

Genset Models:	Net kg	Length mm	Width mm	Height mm
LDS225P/230P	3200	2650	1110	1810
LDS250P	3200	2650	1110	1810
LDS300P	3400	2750	1110	1860



PERKINS ENGINE TECHNICAL DATA

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Generating Set Model:	LDS225P/230P	LDS250P	LDS300P	
Engine Manufacturer:	PERKINS	PERKINS	PERKINS	
Model:	1506A-E88TAG2	1506A-E88TAG3	1506A-E88TAG5	
Number of Cylinder:	6 In line	6 In line	6 In line	
Displacement:	8.8 Litre	8.8 Litre	8.8 Litre	
Cycle	4 stroke	4 stroke	4 stroke	
Cooling System	Water cooled	Water cooled	Water cooled	
Combustion System	Direct Injection	Direct Injection	Direct Injection	
Bore/Stroke: (mm)	112 x 149	112 x 149	112 x 149	
Aspriation:	Turbo charged A2A	Turbo charged A2A	Turbo charged A2A	
Direction of rotation	Anti-clockwise	Anti-clockwise	Anti-clockwise	
Lub. Oil Capacity ltrs:	41	41	41	
Coolant capacity ltrs:	29.6	29.6	33.2	
Electrical equipment	24vDC	24vDC	24vDC	
Compression Ratio:	16:1:1	16:1:1	16:1:1	
	50	hz		
Engine Speed:	1500rpm	1500rpm	1500rpm	
Maximum Continous				
Power at Flywheel: kw	205	228	273	
Maximum Standby				
Power at Flywheel: kw	228	250	299	
Fuel Cons: L/hr		1		
110%	51.5	60.7	73.1	
100%	48.6	55.5	64.9	
75%	35.7	41.6	48.2	
50%	23.5	28.9	33	
	60	hz		
Engine Speed:	1800rpm	1800rpm	1800rpm	
Maximum Continous				
Power at Flywheel: kw	218	257	312	
Maximum Standby				
Power at Flywheel: kw	239	284	345	
Fuel Cons: L/hr				
110%	N/A	69.8	85.7	
100%	N/A	63.1	77.1	
75%	N/A	47.5	56.8	
50%	N/A	33.1	38.9	

NOTE: All engine performance data based on our maximum continuous rating at the standard reference conditions specified. Fuel consumption data at full load with a diesel fuel with a specific gravity of 0.85 conforming to BS2869:1988, Class A2

In line with our policy of continuous product development, we reserve the right to change specifications without notice.

ALTERNATOR MODELS

Mecc Alte (UK)	ECO38-3S	ECO38-1L	ECO38-2L
Newage Stamford	UCD274J	UCD274K	HCI444D
Leroy Somer	LSA46.2L6	LSA46.2L6	LSA46.2VL12

STANDARD SUPPLY:

12/24 volt axial starter motor 12/24 volt heavy duty batteries Engine driven charging alternator

Engine starting motor

Set mounted heavy duty tropical radiator an pusher fan

Fuel oil filter Lube oil filter Air intake filter

Energised to run solenoid Low oil pressure switch High engine temperature switch

Industrial silencer with flexible section

Mechanical/electrical governor or ECM (check with sales)

8hr base fuel tank up to 800kva Open Skid base above 800kva

Captive AVMs

One set operation manuals

One set engine and alternator maintenance books

One set electrical schematic drawings

TESTING All units are fully tested in our works prior to depatch

WARRANTY All PowerCo equipment carries a full 12 month warranty in accordance with our conditions of sale. 24 month warranties are available FOC for standby units running at limited hours (please check with sales for full details).

AVAILABLE OPTIONS:

Residential silencers

55DBA-85DBA weatherproof acoustic canopies and containers

Critical silencers Full EEC trailers Non EEC trailers Free standing fuel tanks

Bunded fuel tanks

Automatic fuel make-up system

Fuel level warnings

CE certification

Unilimited other options are available (contact sales for details)

ALTERNATOR:

We use Cummins Generator Technology (Newage Stamford), Leroy

Somer of France and also Mecc Alte of the UK.

Brushless revolving field

4 pole

Class H temperature rise 125/40

Class H Insulation Automatic voltage regulator

Single bearing

0.5% - 1% voltage regulation TIF 50/NEMA MGI-22-43

THF>3%

RFI to BS800

50HZ voltage range - 380/220 - 415/240v 60HZ voltage range - 220/127 - 480/277v

SET MOUNTED DIGITAL CONTROL SYSTEM:

Deep Sea Electronics model 7120 microprocessor engine controller provides metering and alarm facilities via the LCD display as follows:

Emergency stop push button Generator volts line/line

Generator volts line/neutral Generator amps 3 phase

Generator frequency Hz

Mains volts line/line

Mains volts line/neutral Mains frequency Hz

Engine speed

Engine oil pressure

Engine coolant temperature

Engine battery/volts

Engine hours run

Additional engine parameter metering via CAN (engine permitting)

PROTECTIONS:

Generator over-volts - shutdown

Generator under-volts - shutdown

Mains out of limits Mains under volts

Mains over volts

Mains under frequency

Mains over frequency

Over speed - shutdown

Under speed - shutdown

Over frequency Hz - shutdown

Under frequency Hz - shutdown

High current - alarm

Battery charge fail - alarm

Emergency stop

Low oil pressure - shutdown

High engine temperature - shutdown

Fail to start - alarm

High battery volts - alarm

Low battery volts - alarm

Fail to come to rest - alarm

Loss of speed sensing signal - alarm

LED indication indicates - alarm

(amber) or shutdown (red flashing)

USB programming port - standard printer cable connection

TIMERS:

Start delay

Stop delay

Crank/crank rest timer

Engagement attempt an manual crank limit

Safety on delay timer

Warm up timer

Cooling timer Exercise scheduler

Energise to stop timer

CONTROL SYSTEM UPGRADES:

7220 gives the following extras: (Standard supply above 650kVA)

Generator power factor

Generator phase sequence

Generator kVA

Generator kVA/hr Generator kVAr

Generator kVAr/hi

Generator kW

Generator kW/hr

Load shedding control

Dummy load control

Dual mutual

Remote SCADA monitoring (wired)

7320 gives the following extras:-

(Standard supply above 1000kVA) SMS messaging (modem required)

SMS start/stop (modem required)

Ethernet comms (additional module required)

I/O expansion

RS232 & RS484 comms

8610 auto-synchronising unit gives you the following upgrades:-

Synchroscope display Bus volts line/line

Bus volts line/neutral

Bus frequency Hz Bus phase sequence

Full automatic synchronising

Automatic load sharing

Automatic load level demand (switches units on and off line

depending on load levels)

Modbus RTU/TCP