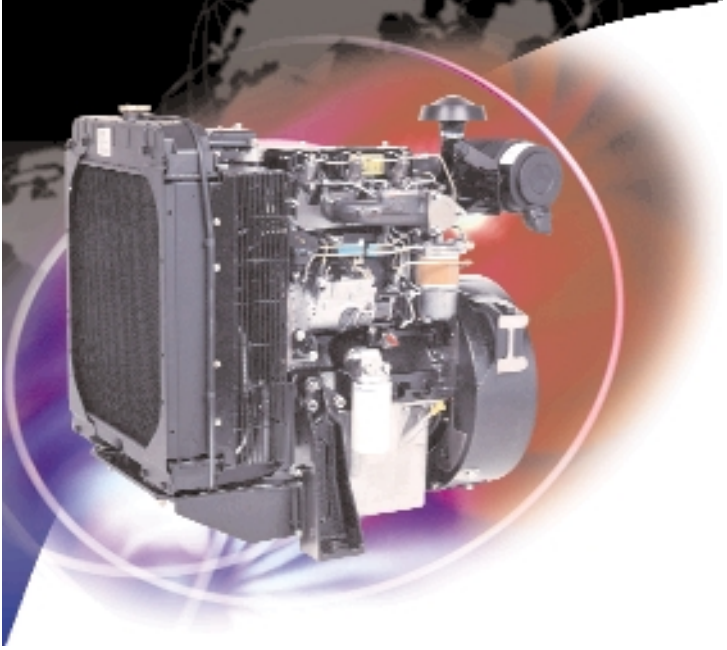


3.1524

Diesel Engine - ElectropaK
27.7 kWm 1500 rev/min
31.5 kWm 1800 rev/min

The Perkins 3.1524 ElectropaK engine has long been the benchmark heavy duty three cylinder engine. Its reputation for performance and reliability is renowned throughout the power generation industry.

The 3.1524 is a naturally aspirated, 3 cylinder, 2.5 litre engine with premium design, economic calibre and durable operation. It has the ideal characteristics for the demands of today's electrical power generation market.

Economic power

Direct injection combustion technology and rotary fuel injection pump give performance with excellence fuel economy.
Rated speed is changeable between 1500rpm and 1800rpm allowing standard builds to operate at either 50Hz or 60Hz.
One side servicing for reduced service time and cost.

Durable power

The robust construction of the 3.1524 engine ensures long life and dependable performance.
Over four million units in service worldwide for over 40 years proves the engines pedigree.

Reliable power

Wherever a Perkins' ElectropaK engine is put into service, it will never be far from the support provided by a global network of 4000 distributors and dealers, all backed by a parts distribution centre giving 24 hour service, 365 days a year.
Suitable for operation in ambient temperatures up to 46°C.
Fuelled starting aid for temperatures down to -20°C.

Engine Speed rev/min	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1500	Prime power	27.5	22.0	25.1	33.7	24.9	33.4
	Standby power	30.5	24.5	27.9	37.4	27.7	37.1
1800	Prime power	31.0	25.0	28.7	38.5	28.3	38.0
	Standby power	35.0	28.0	31.9	42.8	31.5	42.2

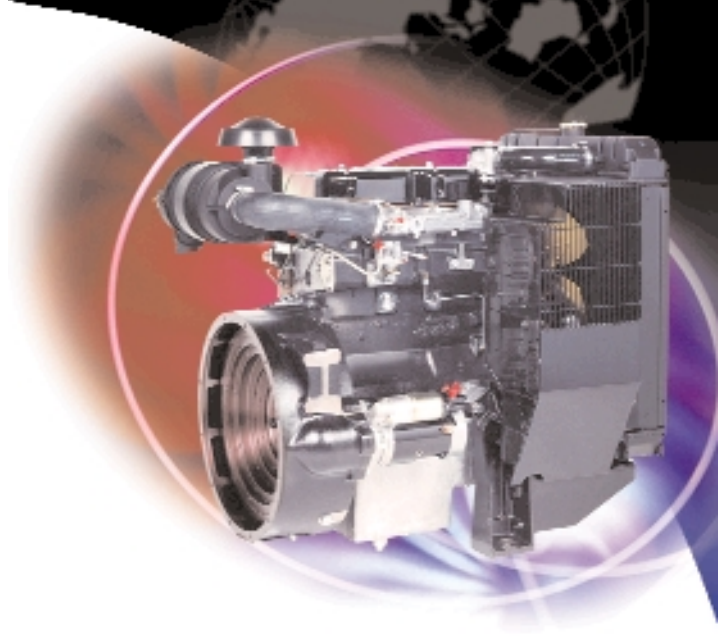
All ratings data based on operation under ISO 3046 conditions using typical fan sizes and drive ratios. For operation outside of these conditions please consult your Perkins Engines contact. Performance tolerance quoted by Perkins is ±5%.

Electrical ratings assume a power factor of 0.8 and a generator efficiency of 89%.

Fuel specification: BS2869 Part 2 1998 Class A2 or ASTM D975 D2.
Lubricating oil: A single or multigrade oil to ACEAE1 E2 or CD/SD.

Rating Definitions
Prime power: Power available at variable load in lieu of main power network. An overload of 10% is permitted for one hour in every twelve hours of operation.
Standby power: Power available at variable load in the event of a main power network failure. No overload is permitted.

3.1524



Standard ElectropaK Specification

Air Inlet
Mounted air filter

Fuel System
Rotary fuel injection pump
Mechanical governing conforms to ISO8528-5 1993 (E)
Class G2, ISO3046-4M3
Full flow fuel filter with pre filter

Lubrication System
Rear well aluminium sump with filler and dipstick
Spin-on full-flow oil filter

Cooling System
Belt-driven circulating pump
15” belt-driven fan and guards
Mounted radiator and pipework

Electrical Equipment
12 Volt starter motor and 12 Volt 55 Amp alternator with DC output
12 Volt senders for oil pressure and coolant temperature
12 Volt shutdown solenoid energised to run
Cold start aid

Flywheel and Housing
High inertia flywheel to SAE J620 Size 10/11 1/2
Cast iron SAE 3 flywheel housing

Mountings
Front engine mounting bracket

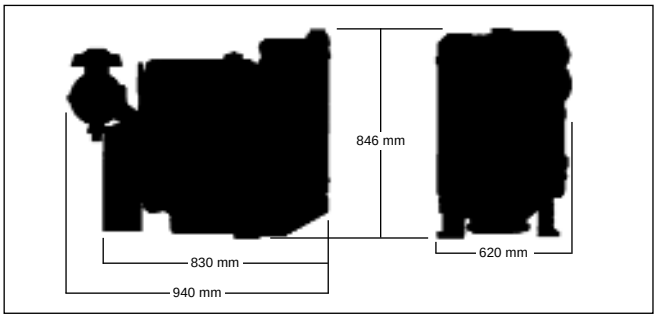
Optional Equipment

24V alternator
24V starter motor
Water temperature gauge and sender
Heater/starter switch
Rear engine mountings
Workshop manual
Parts book
User handbook
Electronic governor (12V only)

ElectropaK General Data

Number of cylinders	3
Cylinder arrangement	Vertical, in-line
Cycle	4-stroke
Induction system	Naturally aspirated
Combustion system	Direct injection
Cooling system	Water-cooled
Displacement	2.5 litres
Bore and stroke	91.4 mm x 127.0 mm
Compression ratio	16.5:1
Direction of rotation	Clockwise, viewed from the front
Firing order	1,2,3
Total lubrication system capacity	6.17 litre
Coolant capacity (inc radiator)	11.85 litres
Length	940 mm
Width	620 mm
Height	846 mm
Total weight (dry)	311 kg
Total weight (wet)	328 kg

Fuel consumption litres/hour (UK gallons/hour)		
Power rating	1500 rev/min	1800 rev/min
Standby power	8.2 (1.8)	9.6 (2.1)
Prime power	6.9 (1.5)	8.3 (1.8)
75% of prime power	5.1 (1.1)	6.2 (1.3)
50% of prime power	3.5 (0.7)	4.5 (1.0)



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