



1000 Series

Diesel engine - Electropak

1006TG2A

100.0 kWm 1500 rev/min
118.0 kWm 1800 rev/min



The Perkins 1000 Series family of Electropak engines are renowned throughout the power generation industry for their superior performance and reliability.

The 1006TG2A is a turbocharged, 6 cylinder, 6 litre engine. Its premium design features provide economic and durable operation offering the ideal characteristics for electrical power generation.

Economic power

One side servicing means reduced service time and cost. Unique Quadram combustion system enables high power output with lower fuel consumption and noise. Rated speed is changeable between 1500 rpm and 1800 rpm allowing standard builds to operate at either 50 Hz or 60 Hz.

Clean, efficient power

Operator and environmentally friendly with low noise and rapid startability and low emissions that satisfy TA Luft requirements.

Durable power

Maximum cooling efficiency is provided by a gear driven water pump and independent fan drive. Leak free operation is ensured by Viton crankshaft seals and sophisticated controlled swell joints, giving protection in the toughest conditions. Inserted valve seats, oil spray cooled pistons and compact plate cooler give enhanced engine life.

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 4,000 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 53°C (46°C if a canopy is fitted). 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	102.5	82.0	95.5	128.0	91.0	122.0
	Standby Power	112.5	90.0	105.0	141.0	100.0	134.0
1800	Prime Power	120.5	96.5	113.5	152.5	107.0	143.5
	Standby Power	132.5	106.0	125.0	167.5	118.0	158.0

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 contact.

Performance tolerance quoted by Perkins is ±5%.

Electrical ratings assume a power factor of 0.8 and a generator efficiency of 90%.

Fuel specification: BS2869 Part 2 1998 Class A2 or ASTM D975 D2.

Lubricating oil: A single or multigrade oil to ACEA/E1 E2 or API 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.

1000 Series 1006TG2A

Standard Electropak Specification

Air Inlet

Mounted air filter and turbo charger

Fuel System

Rotary fuel injection pump
Mechanical governing conforms to ISO 8528-5: 1993 (E)
Class G2, ISO3046-4M3
Spin-on full flow fuel oil and pre-filter
Cold start aid

Lubrication System

Flat bottomed aluminium sump
Spin-on full flow oil filters
Oil cooler

Cooling System

Thermostat controlled cooling system with gear driven water pump
Fan drive and 22" pusher fan
Radiator (and piping) with fan guards

Electrical System

12 Volt starter motor and 55 Amp alternator
Oil pressure switch and coolant temperature switch

Flywheel and Housing

Cast iron SAE 3 flywheel housing
Flywheel to SAE J620 size 10/11½

Mountings

Front engine mountings

Optional Equipment

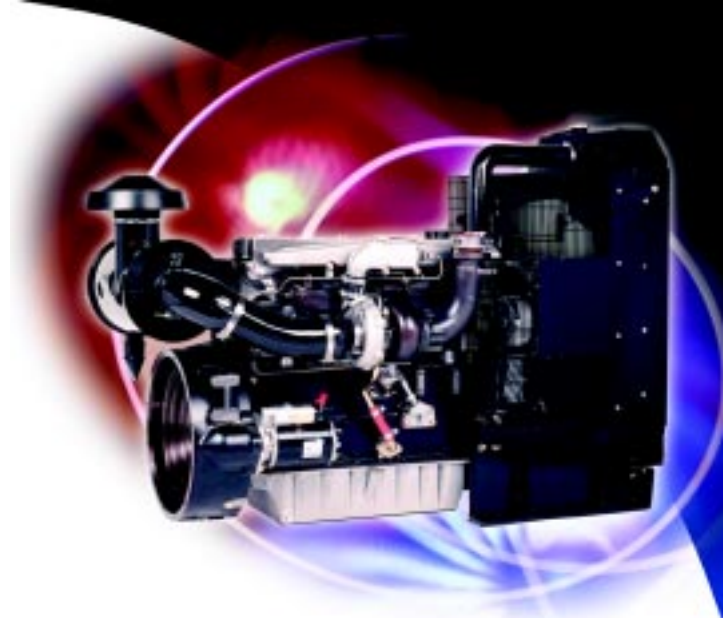
24 Volt alternator
24 Volt starter motor
Water temperature gauge and sender
Heater/starter switch
Rear engine mountings
Workshop manual
Parts book
User handbook
Electronic governor (12V only)



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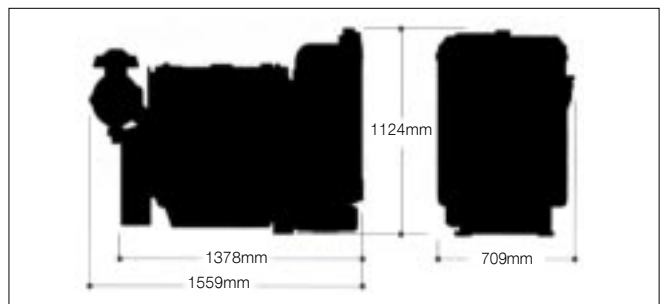
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General Data

Number of cylinders	6
Cylinder arrangement	Vertical in-line
cycle	4 stroke
Induction system	Turbocharged
Combustion system	Direct injection
Cooling system	Water-cooled
Displacement	5.99 litres
Bore and stroke	100.0 mm x 127.0 mm
Compression ratio	16.0:1
Direction of rotation	Clockwise, viewed from the front
Firing order	1,5,3,6,2,4
Total lubrication system capacity	16.1 litres
Coolant capacity (inc radiator)	27.7 litres
Length	1559 mm
Width	709 mm
Height	1124 mm
Total weight (dry)	586 kg
Total weight (wet)	623 kg

Power rating	Fuel consumption litres/hour (UK gallons/hour)	
	1500 rev/min	1800 rev/min
Standby power	27.1 (5.9)	31.7 (6.9)
Prime power	24.3 (5.3)	28.9 (6.3)
75% of prime power	17.9 (3.9)	21.7 (4.8)
50% of prime power	12.3 (2.7)	15.4 (3.4)



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