



# **1000 Series** 1006TAG Diesel Engine – ElectropaK

137.5 kWm 1500 rev/min 151.5 kWm 1800 rev/min

# Economic power

Single side servicing for reduced service time and cost. Unique Fastram combustion system enables high power output plus low fuel consumption. Electronic governor gives close control and means that the rated speed can be set at

site to either 1500 rpm or 1800 rpm allowing standard builds to operate at either 50 Hz or 60 Hz.

# Clean, efficient power

Operator and environmentally friendly with low noise, 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' ElektropaK 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  $52^{\circ}$ C ( $46^{\circ}$ C if a canopy is fitted). Fuelled starting aid for temperatures down to - $20^{\circ}$ 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 Standby Power	140.5 155.0	112.5 124.0	132.0 145.0	177.0 194.5	125.0 137.5	167.5 184.5
1800	Prime Power Standby Power	155.0 170.5	124.0 136.5	148.0 163.0	198.5 218.5	137.5 151.5	184.5 203.0

All ratings data based on operating under ISO/TR 14396/ISO 8528 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: BS 2869 Part 2 1998 Class A2 or ASTM D975 D2

Lubrication oil: A single or multigrade oil to ACEAE1 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 1 hour in every 12 hours of operation.

Standby Power: Power available at variable load in the event of a main power network failure. No overload is permitted.

All information in this document is substantially correct at time of printing and may be altered subsequently



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

The 1006TAG 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.

# 1000 Series

# Standard ElectropaK Specification

#### Air inlet

Mounted air filter and turbocharger

#### Fuel system

- Rotary fuel injection pump
- Mechanical governing conforms to ISO 8528-5 1993(E) Class G2, ISO 3046-4M3
- Spin-on full flow fuel oil filters and pre-filter

#### 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
- 25" belt-driven pusher fan and guards
- Radiator incorporating air-to-air charge cooler and piping

#### Electrical system

- 12 volt starter motor and 55 amp alternator with DC output
- 12 volt oil Pressure and coolant temperature switches
- 12 volt shut down solenoid energised to run cold start aid

#### Flywheel and housing

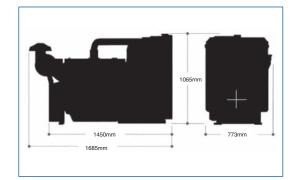
High inertia flywheel to SAE J620 size 10/11<sup>1</sup>/<sub>2</sub>

#### Mountings

Front engine mounting bracket

# **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 (12 volt only)



# General Data

Length

Width

Height

Total weight (dry)

Number of cylinders Cylinder arrangement Cycle Induction system

Combustion systemECooling systemWBore and stroke1Displacement5Compression ratio1Direction of rotationAWfillTotal lubrication systemcapacityCoolant capacity1Coolant capacity3

6 Vertical in-line 4 stroke Turbocharged, air-to-air aftercooled Direct injection Water-cooled 100 x 127 mm 5.99 litres 17.0:1 Anti-Clockwise, viewed on the flywheel 19.0 litres

37.22 litres 1685 mm 773 mm 1065 mm 586 kg

Overall dimensions and weight will depend on final specification.

Fuel consumption litres/hour (UK gallons/hour)						
Power Rating %	1500 rev/min	1800 rev/min				
110 100 75 50	36.6 (8.0) 33.3 (7.3) 25.2 (5.5) 16.9 (3.7)	41.0 (9.0) 37.7 (8.3) 29.5 (6.5) 18.9 (4.2)				

# **Perkins**

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