



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.

## **Perkins**®

# 1000 Series

#### Diesel Engine – ElectropaK

133.5 kWm 1500 rev/min 147.0 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

- Suitable for operation in ambient temperatures up to 52°C (46°C if a canopy is fitted).
- Fuelled starting aid for temperatures down to -20°C.

#### **Product Support**

- Perkins actively pursues product support excellence by ensuring our distribution network invest in their territory - strengthening relationships and providing more value to you, our customer.
- Through an experienced global network of distributors and dealers, fully trained engine experts deliver total service support around the clock, 365 days a year. They have a comprehensive suite of web based tools at their fingertips covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine.
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts and service. We give 100% reassurance that you receive the very best in terms of quality for lowest possible cost .. wherever your Perkins powered machine is operating in the world.

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	136.0 150.0	109.0 120.0	128.4 141.0	171.4 187,7	121.0 133.5	162.3 179.0
1800	Prime Power Standby Power	151.0 165.5	120.5 132.5	144.2 158.5	193.8 212.1	134.0 147.0	179.7 197.1

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 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.

## 1000 Series 1006TAG

#### 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

### **B**Perkins<sup>®</sup>

#### Perkins Engines Company Limited

Peterborough PE1 5NA United Kingdom Telephone +44 (0)1733 583000 Fax +44 (0)1733 582240 www.perkins.com 1065mm 1685mm 1685mm

Fuel Consumption									
Engine Speed	1500 r	ev/min	1800 rev/min						
Lingine Speed	g/kWh	l/hr	g/kWh	l/hr					
Standby	7.6	34.6	9.1	41.3					
Prime power	6.9	31.5	8.3	37.6					
75% of prime power	5.3	24.1	6.4	28.9					
50% of prime power	3.5	16.5	4.3	19.4					

#### General Data

Number of cylinders Cylinder arrangement Cycle Induction system

Combustion system Cooling system Bore and stroke Displacement Compression ratio Direction of rotation

Total lubrication system capacity Coolant capacity (inc. radiator) Length Width Height Total weight (dry) 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 690 kg

Overall dimensions and weight will depend on final specification.

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