

# @ Perkins

## **1000 Series** Diesel engine - ElectropaK

## **1006TAG** 133.5 kWm 1500 rev/min 147.0 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 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.

#### 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

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' 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 52°C (46°C if a canopy is fitted). Fuelled starting aid for temperatures down to -20°C.

Engine Speed	Type of Operation	Typical Generator Output (net)		Engine Power			
(rev/min)				Gross		Net	
(iewithin)		kVA	kWe	kWm	bhp	kWm	bhp
1500	Prime Power	136.0	109.0	127.5	171.5	121.0	162.5
	Standby Power	150.0	120.0	140.0	187.5	133.5	179.0
1800	Prime Power	151.0	120.5	143.0	194.0	134.0	180.0
	Standby Power	165.5	132.5	157.5	212.0	147.0	197.0

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  $\pm 5\%$ .

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 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 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 1006TAG

## Standard ElectropaK Specification

#### Air Inlet

Mounted air filter and turbocharger

#### Fuel System

Rotary fuel injection pump Electronic governor – speed control to BS5514 Class A0, ISO 3046-4M3 Twin spin-on full flow fuel oil filter 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 25" pusher fan Radiator (and piping) with fan guards incorporating air-to-air charge cooler

#### **Electrical System**

12 Volt starter motor and 55 Amp alternator Oil pressure switch and coolant temperature switch 12 Volt shut off solenoid – energised to run

#### Flywheel and Housing

Cast iron SAE 3 flywheel housing Flywheel to SAE J620 size 10 / 111/2

#### 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

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All information in this leaflet is substantially correct at the time of printing but may be changed subsequently by the Company



### **General Data**

Number of Cylinders Cylinder Arrangement Cycle Induction System

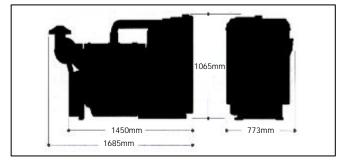
Combustion System Cooling System Displacement Bore and Stroke Compression Ratio Direction of Rotation Firing Order Total Lubrication System Capacity Coolant Capacity (inc radiator) Total Weight (dry) Total Weight (wet) Length Width Height

6 Vertical in-line 4 stroke Turbocharged, air-to-air aftercooled Direct injection Water-cooled 5.99 litres 100.0 mm x 127.0 mm 17.0:1 Clockwise, viewed from the front 1,5,3,6,2,4 19.0 litres

37.22 litres

586 kg 630 kg 1685 mm 773 mm 1065 mm

Fuel Consumption Litres/Hour (UK gallons/hour)									
Power rating %	1500 rev/min		1800 rev/min						
110	34.6	(7.6)	41.3	(9.1)					
100	31.5	(6.9)	37.6	(8.3)					
75	24.1	(5.3)	28.9	(6.4)					
50	16.5	(3.6)	19.4	(4.3)					



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