

1000 Series 1006TG2A

Diesel Engine - ElectropaK

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

Economic Power

- Single side servicing for reduced service time and cost.
- Unique Quadram combustion system enables high power output plus low fuel consumption and noise.
- Rated speed is changable between 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°C (46°C if a canopy is fitted).
- Fuelled starting aid for temperatures down to -20°C.

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.

| 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 | 102.5 112.5 | 82.0 90.0 | 95.5 105.0 | 128.0 141.0 | 91.0 100.0 | 122.0 134.0 |
| 1800 | Prime Power Standby Power | 120.5 132.5 | 96.5 106.0 | 113.5 125.0 | 152.5 167.5 | 107.0 118.0 | 143.5 158.0 |

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.

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Standard ElectropaK Specification

Air inlet

Mounted air filter and turbocharger

Fuel system

- Rotary fuel injection pump
- Mechanical governing speed control to BS5514 Class A1, ISO 3046-4M3
- Spin-on full flow fuel oil filters 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 10/11

Mountinas

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 (12 volt only)

General Data

Number of cylinders
Cylinder arrangement
Cycle
Induction system
Combustion system
Cooling system
Bore and stroke
Displacement

Vertical in-line
4 stroke
Turbocharged
Direct injection
Water-cooled
100 x 127 mm
5.99 litres

Compression ratio 16.0:1
Direction of rotation Clockwise, viewed on

the flywheel 1,5,3,6,2,4

27.7 litres

Firing order 1,5,3,6,2,4
Total lubrication system 16.1 litres

capacity

Coolant capacity

(inc. radiator)

Length1559 mmWidth709 mmHeight1124 mmTotal weight (dry)542kgTotal weight (wet)576 kg

Overall dimensions and weight will depend on final specification.

| Fuel consumption litres/hour (UK gallons/hour) | | | | | | |
|--|--|--|--|--|--|--|
| 1500 rev/min | 1800 rev/min | | | | | |
| 24.1 (5.3) 21.8 (4.8) 16.5 (3.6) | 28.4 (6.2) 25.8 (5.7) 19.9 (4.4) 14.0 (3.1) | | | | | |
| | 1500 rev/min 24.1 (5.3) 21.8 (4.8) | | | | | |



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