



# 2500 Series 2506A-E15TAG3

Diesel Engine – ElectropaK Non-Emissions compliant

435 kWm at 1500 rpm 490 kWm at 1800 rpm



 Mechanically operated unit fuel injectors with advanced electronic control, combined with carefully matched turbocharging, give excellent fuel atomisation which leads to exceptional low fuel consumption.

#### Reliable Power

- Developed and tested using the latest engineering techniques and finite element analysis for high reliability.
- Low oil usage and low wear rates.
- High compression ratio ensures clean rapid starting in all conditions.
- Support comes from a worldwide network of 4,000 distributors and dealers.

## Compact, Clean and Efficient Power

- Exceptional power to weight ratio and compact size gives optimum power density for ease of installation and more cost effective transportation.
- Designed to provide excellent service access for ease of maintenance.



The 2500 Series engine has been developed using the latest engineering techniques and builds on the strengths of the already very successful 2000 Series family and addresses today's uncompromising demands within the power generation industry. Developed from a proven heavy-duty industrial base these products offer superior performance and reliability.

The 2506A-E15TAG3 is a turbocharged and air-to-air charge-cooled, 6 cylinder diesel engine. Its premium features provide exceptional power-to-weight ratio resulting in exceptional fuel consumption.

The overall performance and reliability characteristics make this the prime choice for today's power generation industry.

This engine does not comply with harmonized international regulated emissions limits

Engine Speed (rev/min)	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1500	Baseload power* Prime power Standby power	- 450 500	- 360 400	9 407 451	12 546 605	- 391 435	- 525 583
1800	Baseload power* Prime power Standby power	438 513 563	350 410 450	403 469 514	541 629 689	381 446 490	511 598 657

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1.

Derating may be required for conditions outside these; consult Perkins Engines Company Limited. Generator powers are typical and are based on an average alternator efficiency and a power factor (cos. 0) of 0.8. Fuel specification: BS 2869: Part 2 1998 Class A2 or ASTM D975 D2. Lubricating oil: 15W40 to API Cl4.

Baseload Power: Power available for continuous full load operation. Overload of 10% permitted for 1 hour in every 12 hours operation.

Prime Power: Power available at variable load with a load factor not exceeding 80% of the prime power rating. Overload of 10% is permitted for 1 hour in every 12 hours' operation.

Standby Power: Power available in the event of a main power network failure up to a maximum of 500 hours per year of which up to 300 hours may be run continuously. Load factor may be up to 100% of standby power. No overload is permitted.

<sup>\*</sup> Baseload ratings indicated are under development and will be available later.

# 2500 Series 2506A-E15TAG3

# Standard ElectropaK Specification

### Air inlet

Mounted air filter

#### Fuel system

- Mechanically actuated electronically controlled unit fuel injectors with full authority electronic control
- Governing to ISO 8528-5 class G3 with isochronous capability
- Replaceable 'Ecoplus' fuel filter elements with primary filter/water separator
- Fuel cooler

## Lubrication system

- Wet sump with filler and dipstick
- Full-flow replaceable 'Ecoplus' filter
- Oil cooler integral with filter header

## Cooling system

- Gear-driven circulating pump
- Mounted belt-driven fan
- Radiator supplied loose incorporating air-to-air charge cooler
- System designed for ambients up to 50°C

#### Electrical equipment

- 24 volt starter motor and 24 volt 70 amp alternator with DC output
- ECM mounted on engine with wiring looms and sensors
- 3 level engine protection system

# Flywheel and housing

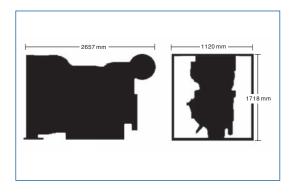
- High inertia flywheel to SAE J620 size 14
- SAE <sup>1</sup>/<sub>2</sub> flywheel housing

### Mountings

Front engine mounting bracket

# **Optional Equipment**

- 110 volt/240 volt immersion heater
- Additional speed sensor
- Temperature and pressure sensors for gauges
- Air filter rain hood
- Twin starters/facility for second starter
- Tool kit
- Additional manuals
- Closed circuit crankcase ventilation system



Fuel Consumption									
Engine Speed	1500 r	ev/min	1800 rev/min						
Lingine Opecu	g/kWh	l/hr	g/kWh	l/hr					
Standby	198	100	200	114					
Prime power	199	90	196	101					
75% of prime power	202	69	205	80					
50% of prime power	213	48	220	57					

## General Data

Number of cylinders 6

Cylinder arrangement Vertical in-line

Cycle 4 stroke Induction system Turbocha

Turbocharged and air-to-

air charge cooled

Combustion system
Cooling system
Bore and stroke

Direct injection
Water-cooled
137 mm x 171 mm

Displacement 15.2 litres Compression ratio 16:1

Direction of rotation Anti-clockwise, viewed

on flywheel

Total lubrication system

capacity

Total coolant capacity

Dimensions

62 litres 58 litres

Length 2657 mm Width 1120 mm

Height 1718 mm

Dry weight (ElectropaK) 1,633 kg

Final weight and dimensions will depend on completed specification



www.perkins.com

Perkins Engines Company Limited

Peterborough PE1 5NA United Kingdom Telephone +44 (0)1733 583000 Fax +44 (0)1733 582240



Distributed by

All information in this document is substantially correct at time of printing and may be altered subsequently Publication No. 1843/10/06 Produced in England ©2006 Perkins Engines Company Limited