

# 2200 Series

## 2206A-E13TAG3

Diesel Engine - Electropak

391 kWm at 1500 rpm  
304 kWm at 1800 rpm



The 2200 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 2206A-E13TAG range are 6-cylinder, turbocharged air-to-air charge cooled diesel engines. It's 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.

### Economic Power

- Mechanically operated unit fuel injectors with electronic control combined with carefully matched turbocharging, give excellent fuel atomisation and combustion with optimum economy.
- Low emissions result from electronically controlled fuel injection.

### 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 ratios ensure clean rapid starting in all conditions.
- Perkins global product support is designed to enhance the customer experience of owning a Perkins powered machine. We deliver this through the quality of our distribution network, extensive global coverage and a range of Perkins supported OEM partnership options. So whether you are an end-user or an equipment manufacturer our engine expertise is essential to your success.

### Compact, Clean and Efficient Power

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

This engine does not comply to 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	300	240	270	362	261	350
	Prime Power	400	320	357	479	348	466
	Standby Power	450	360	400	537	391	525
1800	Prime Power	300	240	278	373	261	350
	Standby Power	350	280	321	431	304	408

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.  $\theta$ ) of 0.8.

Fuel specification: BS 2869: Part 2 1998 Class A2 or ASTM D975 D2. Lubricating oil: 15W40 to API CI4.

Rating Definitions

**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.

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### 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 pusher fan
- Radiator incorporating air-to-air charge cooler, (supplied loose)
- 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 1/2 flywheel housing

#### Mountings

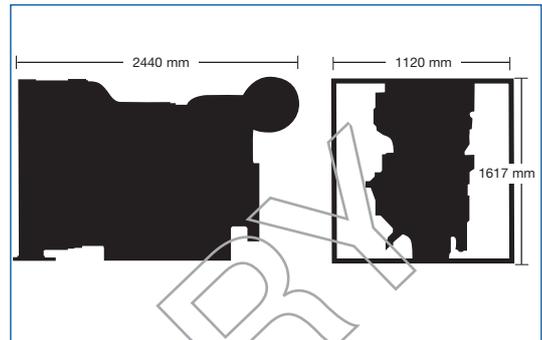
- Front engine mounting bracket

#### Literature

- User's Handbook and Parts Manual

#### 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



Engine Speed	Fuel Consumption			
	1500 rev/min		1800 rev/min	
	g/kWh	l/hr	g/kWh	l/hr
Standby	195	90	207	74
Prime power	202	83	214	66
Continuous base-load	196	60	tbc	tbc
75% of prime power	195	60	222	51
50% of prime power	217	44	229	35

#### General Data

Number of cylinders	6
Cylinder arrangement	Vertical in-line
Cycle	4 stroke
Induction system	Turbocharged and air-to-air charge cooled
Combustion system	Direct injection
Cooling system	Water-cooled
Bore and stroke	130 x 157 mm
Displacement	12.5 litres
Compression ratio	16.3:1
Direction of rotation	Anti-clockwise, viewed on flywheel
Total lubrication system capacity	40 litres
Total coolant capacity	47 litres
Total dry weight	
Dimensions	Length 2440 mm Width 1120 mm Height 1617 mm

Final weight and dimensions will depend on completed specification



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