# 2200 Series 2206A-E13TAG5 Diesel Engine - Electropak

349 kWm @ 1500 rpm 381 kWm @ 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.



Specification				
Number of cylinders	6 vertical in-line			
Bore and stroke	130 x 157 mm	5.1 x 6.1 in		
Displacement	12.5 litres	763 in <sup>3</sup>		
Aspiration	Turbocharged and air-to-air charge cooled			
Cycle	4 stroke			
Combustion system	Direct injection			
Compression ratio	16.3:1			
Rotation	Anti-clockwise, viewed on flywheel			
Total lubricating capacity	40 litres	10.5 US gal		
Cooling system	Water-cooled			
Total coolant capacity	51.4 litres 13.6 US gal			

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#### Features and benefits

## 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

## 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

This engine does not comply to Harmonized International Regulated Emissions Limits



# 2200 Series 2206A-E13TAG5 Diesel Engine - ElectropaK

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#### Technical information

#### 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 G2 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 flywheel housing

## Mountings

· Front engine mounting bracket

#### Literature

User's Handbook and Parts Manual

#### Optional equipment

- 110 volt/240 volt immersion heater
- Temperature and pressure sensors for gauges
- Air filter rain hood
- Twin starters/facility for second starter
- Tool kit



Photographs are for illustrative purposes only and may not reflect final specification.

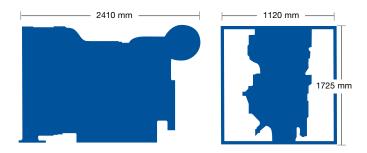
All information in this document is substantially correct at time of printing and may be altered subsequently.

Final weight and dimensions will depend on completed specification.



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Engine package weights and dimensions					
Length	2410 mm	95 in			
Width	1120 mm	44 in			
Height	1725 mm	68 in			
Weight (dry)	1478 kg	3258 lb			

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0 .	Type of operation	Typical generator output (Net)		Engine power			
Speed rpm				Gross		Net	
		kVA	kWe	kWm	hp	kWm	hp
1500	Prime power	350	280	324	435	305	409
	Standby power	400	320	368	494	349	468
1800	Prime power	400	320	373	500	349	468
	Standby power	438	350	407	546	381	511

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1, DIN 6271. 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 BSEN590 or ASTM D975 Class 1D and 2D. Lubricating oil: 15W40 to API Cl4.

#### Rating definitions

Prime power: Variable load. Unlimited hours usage with an average load factor of 70% of the published prime power rating over each 24 hour period. A 10% overload is available for 1 hour in every 12 hours of operation. Standby power: Variable load. Limited to 500 hours annual usage up to 300 hours of which may be continuous running. No overload is permitted.

Developt of prime power	Fuel consumption			
Percent of prime power	1500 rpm g/kWh	1800 rpm g/kWh		
Standby power	203	197		
110%	206	200		
100%	207	201		
75%	211	204		
50%	219	209		

