



2300 Series Diesel Engine - ElectropaK **2306C-E14TAG1** 304 kWm at 1500 rpm 329 kWm at 1800 rpm

The Perkins 2300 Series is a family of well-proven 6 cylinder in-line diesel engines, designed to address today's uncompromising demands within the power generation industry with particular aim at the standby market sector. Developed from a proven heavy-duty industrial base, the engine offers superior performance and reliability.

The 2306C-E14TAG1 is a turbocharged and air-to-air charge-cooled 6-cylinder diesel engine. Its premium features provide economic and durable operation for standby duty, low gaseous emissions, overall performance and reliability.

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 electronic control of the fuel injected.

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 also ensure clean rapid starting in all conditions.

Support comes from a worldwide network of 4000 distributors and dealers.

Compact, efficient power

Exceptional power to weight ratio and compact size give optimum power density and make installation and transportation easier and cheaper.

Designed to provide excellent service access for ease of maintenance.

Clean power

All engines in the 2300 Series family will meet the requirements of EU Stage 2/EPA Tier 2 emissions legislation and are capable of meeting 1/2 TA Luft.

Engine Speed rev/min	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kW	bhp	kW	bhp
1500	Baseload power	250	200	226	303	217	292
	Prime power	300	240	270	362	261	350
	Standby power	350	280	313	420	304	408
1800	Baseload power	281	225	262	351	245	328
	Prime power	344	275	316	424	299	401
	Standby power	379	303	346	464	329	442

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS5514/1

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. θ) of 0.8

Fuel specification: BS 2869: Part 2 1998 Class A2 or ASTM D975 D2

Lubricating oil: 15W40 to API CG4

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.

2300 Series

2306C-E14TAG1



Standard ElectropaK Specification

Air Inlet

Mounted air filter

Fuel System

Mechanically actuated electronically controlled unit fuel injectors with full authority electronic control.
 Governing to ISO8528-5 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 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 1/2 flywheel housing

Mountings

Front engine mounting bracket

Literature

User's Handbook and Parts Manual

Optional Equipment

110/240 Volt immersion heater
 Additional speed sensor
 Temperature and pressure sensors for gauges
 Electric hours counter
 Air filter rain hood
 Twin starters/facility for second starter
 Tool kit
 Additional manuals



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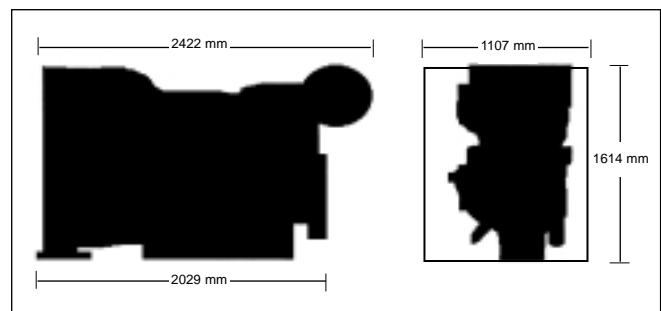
All information given in this leaflet is correct at the time of printing but it may be changed subsequently by the Company

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	137 x 165 mm
Displacement	14.6 litres
Compression Ratio	15.9:1
Direction of Rotation	Anti-clockwise, viewed on flywheel
Total Lubrication System Capacity	68 litres
Total Coolant Capacity	47 litres
Length	2422 mm
Width	1107 mm
Height	1614 mm
Total Weight (Dry)	1690 kg

Engine speed	Fuel Consumption			
	1500 rev/min		1800 rev/min	
	g/kWh	l/hr	g/kWh	l/hr
At Standby power	197	70.6	218	84.2
At Prime power	201	62.4	221	77.4
At Baseload power	204	51.6	224	64.0
At 75% of prime power	208	46.6	226	58.2
At 50% of prime power	225	31.5	237	39.2

Fuel consumption figures are for EU/EPA compliant engines.
 For 1/2 TA Luft compliance please see Perkins' Technical Data Sheet



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