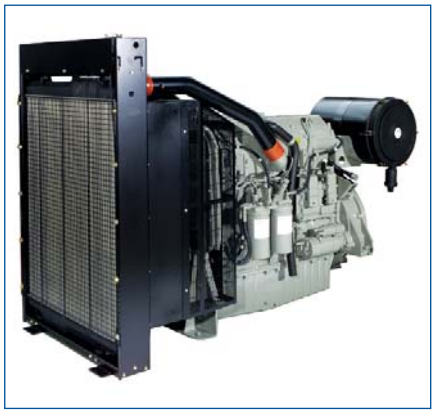


2300 Series

2306C-E14TAG3

Diesel Engine – ElectropaK

387.0 kWm at 1500 rpm
430.0 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-E14TAG3 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 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 ½ TA Luft.

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	353	473	344	461
	Standby Power	450	360	396	531	387	519
1800	Baseload Power	344	275	316	424	299	401
	Prime Power	438	350	393	527	376	504
	Standby Power	500	400	447	599	430	577

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. 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-E14TAG3

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

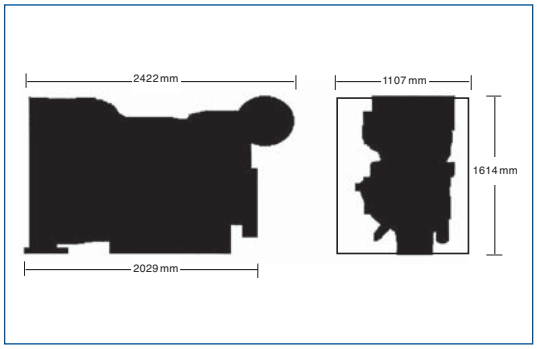
Cooling system
- Gear-driven circulating pump
- Mounted belt-driven fan
- Radiator supplied loose incorporating air-to-air charge cooler
- System designed for ambients up to 50ºC

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 ½ flywheel housing

Mountings
- Front engine mounting bracket

Literature
- User's Handbook and Parts Manual



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

Final weight and dimensions will depend on completed specification

Optional Equipment
- 110 volt/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

Fuel Consumption				
Engine Speed	1500 rev/min		1800 rev/min	
	g/kWh	l/hr	g/kWh	l/hr
At Standby Power Rating	199	88.3	207	103.9
At Prime Power Rating	201	81.1	214	94.2
At Baseload Power Rating	201	62.4	222	78.6
At 75% of Prime Power Rating	199	60.9	222	72.4
At 50% of Prime Power Rating	218	42.3	229	48.4

Fuel consumption figures are for EU/EPA compliant engines.
For ½ TA Luft compliance please see Perkins' Technical Data Sheet.

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