

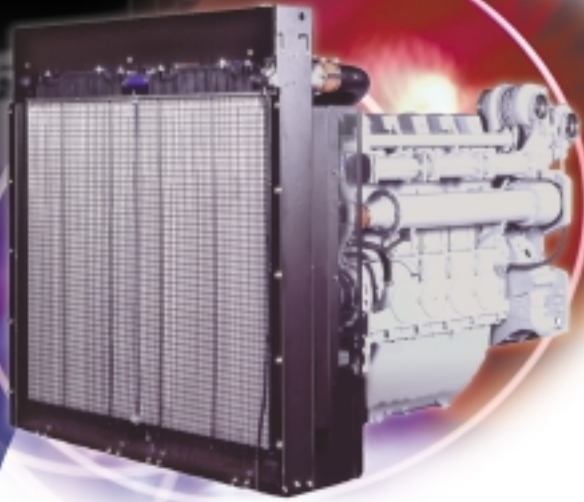


# 4000 Series

## Diesel Engine - ElectropaK

### 4006C-23TAG2A

667 kWm at 1500 rpm  
703 kWm at 1800 rpm



The Perkins 4000 Series is a family of 6, 8, 12 and 16 cylinder 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 engine range that offers superior performance and reliability.

The 4006C-23TAG2A is a newly developed, turbocharged and air-to-air charge cooled, 6 cylinder diesel engine. Its premium features and design provide economic and durable operation as well as an exceptional power to weight ratio, excellent load acceptance and improved gaseous emissions, plus the overall performance and reliability characteristics essential to the power generation market.

#### Economic power

Individual 4 valve cylinder heads giving optimised gas flows.  
Unit fuel injectors ensure ultra fine fuel atomisation and hence controlled rapid combustion.  
Commonality of components with other engines in the 4000 Series family for reduced stocking levels.

#### Reliable power

Developed and tested using the latest engineering techniques.  
Piston temperatures controlled by an advanced gallery jet cooling system.  
Tolerant of a wide range of temperature without derate.  
Over 4,000 distributors and dealers in 160 countries.

#### Compact, clean and efficient power

Exceptional power to weight ratio and compact size give optimum power density for easier transportation and installation.  
Designed to provide excellent service access for ease of maintenance.  
Engines to comply with major international standards.  
Low gaseous emissions that will satisfy the requirements of 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	Continuous Baseload	585	468	523	701	488	654
	Prime power	730	584	643	862	608	816
	Standby (maximum)	800	640	702	941	667	894
1800	Continuous Baseload	600	480	538	721	500	670
	Prime Power	750	600	663	888	625	838
	Standby (maximum)	844	675	741	993	703	942

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.  $\theta$ ) 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.

# 4000 Series

## 4006C-23TAG2A

### Standard ElectropaK Specification

#### Air Inlet

Mounted air filter

#### Fuel System

Direct fuel injection system, fuel lift pump and hand stop control

Governing to ISO8528-5 class G2 with isochronous capability

#### Lubrication System

Wet sump with filler and dipstick

Lubrication oil filters

Engine jacket water/oil temperature stabilizer

#### Cooling System

Twin thermostats, water pump

System designed for ambients up to 50°C

#### Electrical Equipment

24-volt starter motor, 24 volt 70 amp battery charging alternator with integral voltage regulator and activating switch

#### Flywheel and Housing

SAE J620 size 18 flywheel

SAE '0' flywheel housing

#### Literature

User's Handbook and Parts Manual

### Optional Equipment

Heavy-duty air cleaners – paper element with pre-cleaner

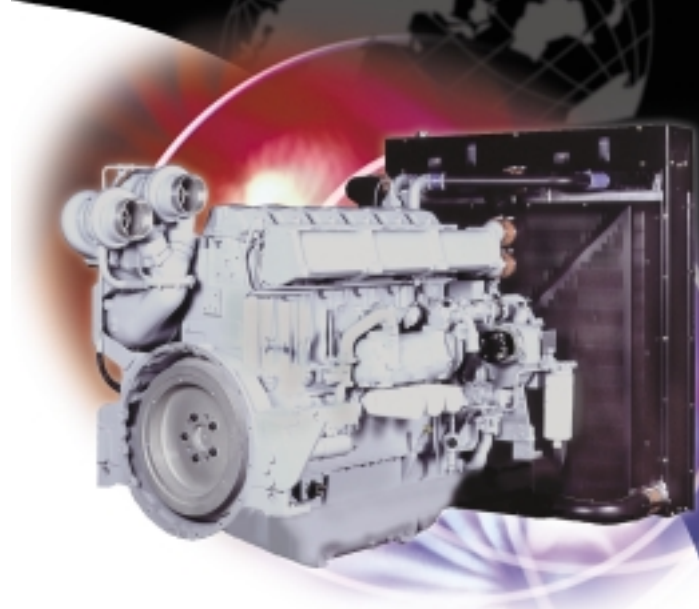
Changeover lubrication oil filter

Changeover fuel filter

Immersion heater with thermostat

Water pipes, clips and hoses for radiator

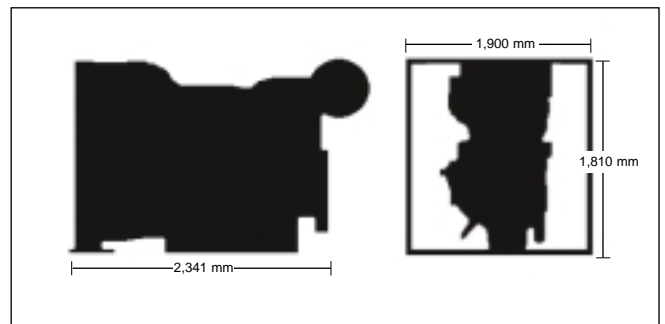
Additional manuals



### General Data

<b>Number of Cylinders</b>	6
<b>Cylinder Arrangement</b>	Vertical in-line
<b>Cycle</b>	4 stroke
<b>Induction System</b>	Turbocharged and air-to-air charge cooled
<b>Combustion System</b>	Direct injection
<b>Cooling System</b>	Water-cooled
<b>Bore and Stroke</b>	160 mm x 190 mm
<b>Displacement</b>	22.921 litres
<b>Compression Ratio</b>	TBC
<b>Direction of Rotation</b>	Anti-clockwise, viewed on flywheel
<b>Firing Order</b>	1, 5, 3, 6, 2, 4
<b>Total Lubrication System Capacity</b>	122.7 litres
<b>Total Coolant Capacity</b>	156 litres
<b>Length</b>	2,341 mm
<b>Width</b>	1,900 mm
<b>Height</b>	1,810 mm
<b>Total Weight (Dry)</b>	TBC kg

Fuel Consumption Targets				
Engine speed	1500 rev/min		1800 rev/min	
	g/kWh	l/hr	g/kWh	l/hr
At Standby power	207	TBA	219	TBA
At Prime power	205	TBA	219	TBA
At Baseload power	TBA	TBA	TBA	TBA
At 75% of Prime power	TBA	TBA	TBA	TBA
At 50% of Prime power	TBA	TBA	TBA	TBA



Distributed by



**Perkins Engines Company Limited**

Peterborough PE1 5NA

United Kingdom

Telephone +44 (0)1733 583000

Fax +44 (0)1733 582240

[www.perkins.com](http://www.perkins.com)

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