

# 1100 Series 1103A-33G Diesel Engine – Electropak

30.4 kWm / 40.8 hp @ 1500 rpm

Building upon Perkins proven reputation within the power generation industry, the 1100 Series range of Electropak engines now fit even closer to customers needs.

In the world of power generation success is only gained by providing more for less. With the 1103A-33G Perkins has engineered even higher levels of reliability, yet lowered the cost of ownership.

1100A units are designed for territories that do not require compliance to EPA or EU emissions legislation. These units are able to meet TA luft legislation.



Specification		
Number of cylinders	3 vertical in-line	
Bore and stroke	105 x 127 mm	4.1 x 5 in
Displacement	3.3 litres	201 in <sup>3</sup>
Aspiration	Naturally aspirated	
Cycle	4 stroke	
Combustion system	Direct injection	
Compression ratio	19.25:1	
Rotation	Anti-clockwise, viewed from flywheel	
Total lubricating capacity	8.3 litres	2.2 US gal
Cooling system	Water-cooled	
Total coolant capacity	10.2 litres	2.7 US gal

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

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 **Perkins®**

THE HEART OF EVERY GREAT MACHINE

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## Features and benefits

### Compact, efficient power

- 1100 Series is the result of an intensive period of customer research that has guided the development of the range
- The new 3.3 litre cylinder block ensures bore roundness is maintained under the pressures of operation. It also ensures combustion and mechanical noise is lowered
- A new cylinder head has re-established Perkins mastery of air control

### Quality by design

- Product design and Class A manufacturing improvements enhance product reliability while maintaining Perkins legendary reputation for durability

### Cost effective power

- Compact size and low noise
- Lower fuel consumption and oil use
- 500 hour service intervals
- **Warranties and Service Contracts**

We provide one-year warranties for constant speed engines and two-year warranties for variable speed models, as standard. These are supported by multilevel Extended Service Contracts that can be bought additionally

Discover more: [www.perkins.esc](http://www.perkins.esc)

### 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
- To find your local distributor: [www.perkins.com/distributor](http://www.perkins.com/distributor)

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## Technical information

### Air inlet

- Mounted air filter

### Fuel system

- Rotary type pump
- Next generation fuel filter

### Lubrication system

- Wet sump with filler and dipstick
- Spin-on oil filter

### Cooling system

- Thermostatically-controlled system with gear-driven circulation pump and belt-driven pusher fan
- Mounted radiator and piping

### Electrical equipment

- 12 volt starter motor and 12 volt 65 amp alternator with DC output
- 12 volt shutdown solenoid energised to run

### Flywheel and housing

- High inertia flywheel to SAE J620 size 10/11½
- SAE 3 flywheel housing

### Mountings

- Front engine mounting bracket

### Literature

- Operation and Maintenance Manual (OMM)

### Optional equipment

- Woodward electronic governor (LCG2)
- A selection of optional items is available to enable the customer to prepare a specification precisely matched to the needs

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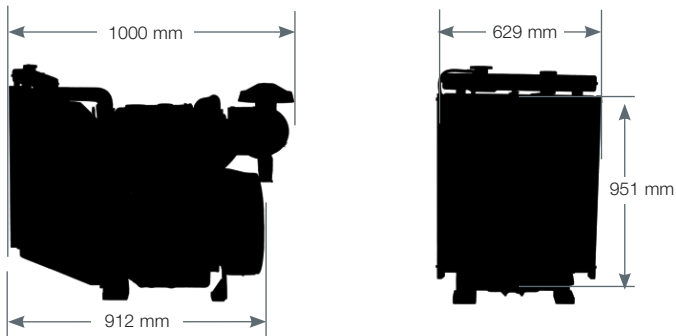
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Engine package weights and dimensions

Engine package weights and dimensions		
Length	1000 mm	39.3 in
Width	629 mm	24.7 in
Height	951 mm	37.4 in
Weight (dry)	412 kg	908 lb

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Speed rpm	Type of operation	Typical generator output (Net)		Engine power			
				Gross		Net	
		kVA	kWe	kWm	hp	kWm	hp
1500	Prime Power	30.0	24.0	28.2	37.8	27.7	37.1
	Standby (maximum)	33.0	26.4	31.0	41.6	30.4	40.8

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 DIN EN 590. Lubricating oil: 15W40 to API CG4.

#### Rating definitions

**Prime power:** Variable load. Unlimited hours usage with an average load factor of 80% of the published prime power 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.

Percent of prime power	Fuel consumption litres/hour temperate/tropical at 1500 rpm	
	UK g/hr	l/hr
Standby (maximum)	1.78	8.1
Prime power	1.58	7.2
75%	1.23	5.61
50%	0.89	4.06
25%	0.58	2.65

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