1100 Series 1104C-44TG3 Diesel Engine – ElectropaK

59 kWm 1500 rev/min

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

In the world of power generation today, success is only gained by providing more for less. Therefore with this new 1104C-44TG3 unit, Perkins has engineered for its customers even higher levels of reliability, yet lowered the cost of ownership. Crucially, bare engine noise is lower than ever before.

Rapid starting and pick-up are naturally built-in especially for cold operation, but where legislation or local markets demand an emissions capability, then the 1104C-44TG3 satisfies EU2007 Stage II mobile off-highway legislation.

1100 Series see the marriage of technology to customer need. A 4.4 litre unit very quietly setting a new standard in prime power supply and standby for the power generation industry.

Compact and efficient power

The Perkins 1100 Series family was developed following an intensive period of customer research. The 3.3 and 4.4 litre engines feature new cylinder blocks which ensure bore roundness is maintained under the pressures of operation, as well as significantly reducing mechanical and combustion noise. A new cross-flow cylinder head design optimises combustion control, and combines with turbocharger and charge cooler technology to achieve the best combination of power delivery and low exhaust emissions.

Cleaner and quieter power

The refined structure of the 1100C range leads to an exceptionally low noise signature. To meet environmental needs swirl conditioned air is delivered through the new cross-flow cylinder head, and burns cleanly with the high pressure fuel from an advanced technology rotary pump.

Quality by design

Class A manufacturing improvements ensure that product reliability meets the high standards demanded by customers. Product design is focused on maintaining Perkins' legendary reputation for durability.

Cost effective power

The compact packaging and low noise performance of the 1100C range bring clear benefits to the Genset packager. Low cost of operation is assured by lower fuel and oil consumption, 500 hour service intervals, and the two year warranty.
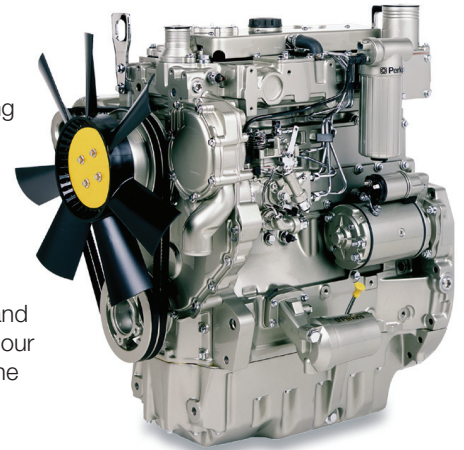
Product support

- 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

Certified against the requirements of EU 2007 (EU 97/68/EC Stage II) legislation for non-road mobile machinery, powered by constant speed engines

Engine Speed (rev/min)	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1500	Prime Power	60	48	56	75	53	72
	Standby (maximum)	66	53	62	83	59	79

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 typical alternator efficiencies and a power factor (cos θ) of 0.8. **Fuel specification:** BS 2869 Class 2 or ASTM D975 D2. Lubricating oil: API CH4/ACEA E5.

Rating Definitions
Prime Power: Power available at variable load in lieu of a main power network. Overload of 10% permitted for 1 hour in every 12 hours operation.
Standby (maximum): Power available at variable load in the event of a main power network failure. Maximum use 500 hours per year. No overload is permitted.Limited

Perkins®

THE HEART OF EVERY GREAT MACHINE

1100 Series 1104C-44TG3 Diesel Engine – ElectropaK

59 kWm 1500 rev/min

1240 mm

650 mm

951 mm

1045 mm
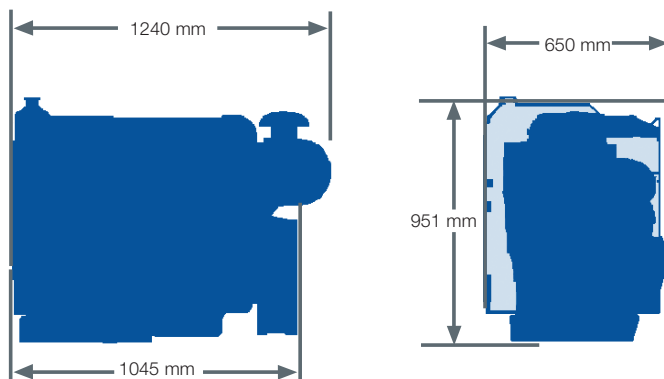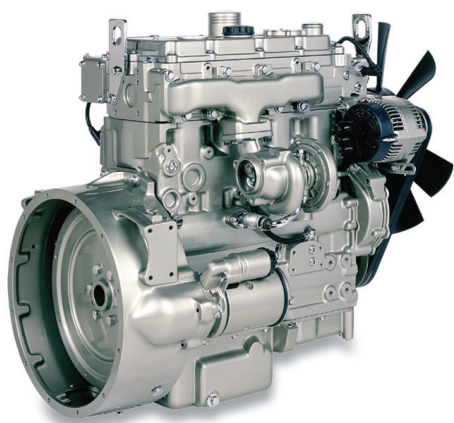
Standard ElectropaK specification

Air inlet
- Mounted air filter

Fuel system
- Rotary type pump
- Ecoplus fuel filter

Lubrication system
- Cast iron 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
- Glow plug cold start aid

Flywheel and housing
- Flywheel to SAE J620 size 10/11½
- SAE 3 flywheel housing

Literature
- User's Handbook

Optional equipment
- Workshop manual
- Parts book

Fuel Consumption		
Engine Speed	1500 rev/min	
	g/kWh	l/hr
Standby	219	17.8
Prime Power	219	16.2
75% of Prime Power	214	11.9
50% of Prime Power	217	8.0

General data

Number of cylinders .... 4 vertical in-line
Bore and stroke.....................................105 x 127 mm
Displacement .... 4.41 litres
Aspiration ....Turbocharged
Cycle ....4 stroke
Combustion system..Direct injection
Compression ratio 18.2:1
Rotation.................................Anti-clockwise viewed on flywheel
Cooling system...Water-cooled
Total lubrication system capacity.................................... 8.5 litres
Total coolant capacity .... 12.6 litres
Dimensions – Length .... 1240 mm
                          Width .... 650 mm
                          Height .... 951 mm
Dry weight .... 420 kg

Final weight and dimensions will depend on completed specification

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