1100 Series 1104D-E44TG1 Diesel Engine - Electropak

72 kWm 1800 rev/min

The 1104D turbocharged ElectropaKs are the latest addition to the Perkins 1100 Series ElectropaK range. Perkins has developed this engine in line with our customer's needs by providing the options of either electronic common rail or mechanically controlled fuel systems.

These ultra clean engines are assembled on a new high technology production line. Frequent computerized checks during the production process ensure high build quality is maintained throughout.

Perkins has produced a world-class product for their customers, engineered to give even greater levels of reliability, yet with a lower cost of ownership.

The 1104D-E44TG1 complies with the latest EPA Tier 3 emissions legislation.

Powered by your needs

Hitting the key power nodes required by the market, the 1104D-E44TG1 ElectropaK has been developed to provie a clean and cost effective power solution.

State of the art design

The 1104D utilises the latest common-rail fuel system technologies with a closely optimised air-management system, which is overseen by the latest generation of electronic engine control. This allows the 1104D-E44TG1 to deloiver high power density and excellent fuel economy with low exhaust emissions and minimum heat rejection.

Worldwide power solution

The 1104D has been designed to be worldwide fuel tolerant, and 5% biofuel (RME) options are available to meet local market needs.

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 davs 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

Lower operating costs

The 1104D maintains Tier 2 fuel economy. This will allow many customers to keep existing fuel tanks, avoiding the need for costly redesign. Service intervals are set at 500 hours as standard and Perkins provides comprehensive warranty cover for two years, with three years on major engine components. A low usage warranty package is also available.

Long-term power solution

The 1104D-E44TG1 ElectropaK has been designed to fully comply with stringent EPA Tier 3 emissions regulations, providing an emissions compliant power solution for the future.

Certified against the requirements of EPA Tier 3 legislation for non-road mobile machinery, powered by constant speed engines (EPA 40 CFR Part 89 Tier 3)

Engine Speed (rev/min)	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1800	Prime Power	73.4	58.7	66.2	88.8	65.2	87.4
	Standby (maximum)	80.8	64.6	72.8	97.6	71.8	96.3

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 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.



THE HEART OF EVERY GREAT MACHINE

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Standard ElectropaK specification

Air inlet

• Mounted air filter turbocharger

Fuel system

- Electronic governing (conforms to Class G3 ISO 8528-5)
- Fuel filter

Lubrication system

- Cast iron sump with filler and dipstick
- Oil filter

Cooling system

- Belt driven pusher fan and guards
- Mounted radiator and piping
- Water pump

Electrical equipment

 12 volt starter motor and 12 volt 65 amp alternator with DC output

Flywheel and housing

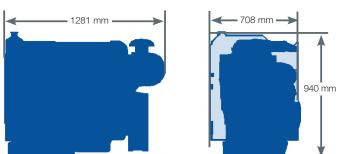
- High inertia flywheel to SAE J620 size 10/11
- SAE 3 flywheel housing

Starting aids

• Glow plugs

Literature

User's Handbook



Fuel Consumption					
Engine Creed	1800 rev/min				
Engine Speed	g/kWh	l/hr			
Standby	230.8	20			
Prime Power	236.4	19			
75% of Prime Power	249.4	17			
50% of Prime Power	275.7	12			
25% of Prime Power	293.1	6			

General data

Number of cylinders					
	105 x 127 mm				
Displacement					
Aspiration	Turbocharged				
Cycle	4 stroke				
Combustion system	Direct injection				
Compression ratio					
Rotation	Anti-clockwise viewed on flywheel				
	Water-cooled				
Total lubrication system capacit	zy				
Dimensions – Length	1281 mm				
Width					
Height					
Final weight and dimensions will depend an completed encoification					

Final weight and dimensions will depend on completed specification

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