

1104D-E44 Electric Power Engines

Power range 1500 rpm 78-105 kW (engine gross power)

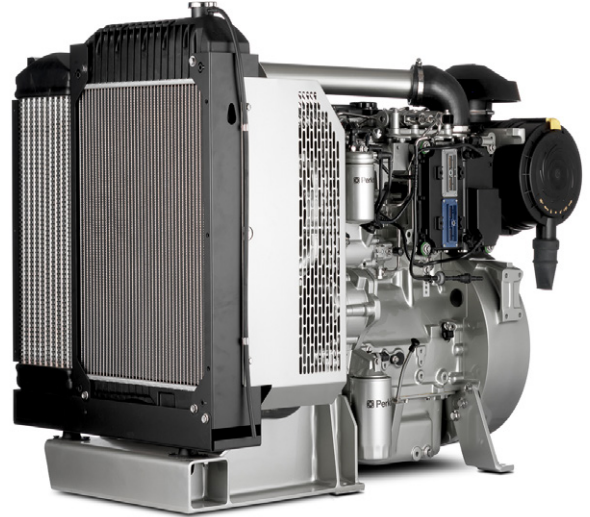
Power range 1800 rpm 65-120 kW (engine gross power)

Emissions EU Stage IIIA/US EPA Tier 3

The Perkins® 1104D-E44TG and 1104D-E44TAG ElectropaKs are the latest addition to 1100 Series electric power line-up. Offering improved power density from a compact package, these ElectropaKs build on Perkins reputation within the power generation industry.

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

Hitting the key power nodes required by the market, the 1104D ElectropaK product line-up consists of three models offering a power solution for both prime and standby applications, in 50 Hz and 60 Hz territories and are certified against the relevant legislation.



Features and benefits

- 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 range to deliver **high power density** and excellent fuel economy with low exhaust emissions and minimum heat rejection.
- Hitting the key power nodes required by the market, the 1104D ElectropaKs have been developed to provide a clean and **cost effective** power solution.
- **Lower operating costs** as the 1104D maintains Tier 2 fuel economy, allowing customers to keep existing fuel tanks and service intervals as 500 hours standard.
- The 1104D has been designed to be worldwide fuel tolerant, and 5% biofuel (RME) options are available to meet local market needs.
- 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 finger tips, covering technical information, parts identification and ordering systems, all dedicated to **maximising the productivity** of your engine. Perkins actively pursues product support excellence with our distribution network investing in their territory to provide you with a consistent quality of support across the globe.
- Throughout the entire life of a Perkins engine, we provide access to genuine factory specification parts giving reassurance that you receive excellent quality for the **lowest possible cost**, wherever your Perkins powered machine is operating in the world.

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Specification

	Model		
	1104D-E44TG1	1104D-E44TAG1	1104D-E44TAG2
Configuration	Electropak		
Cylinders	4 vertical in-line		
Displacement, litres (in ³)	4.4 (269)		
Aspiration	Turbocharged	Turbocharged air-to-air chargecooled	
Bore and stroke, mm (in)	105 x 127 (4.1 x 5.0)		
Combustion system	Direct injection		
Compression ratio	16.7:1		
Exhaust aftertreatment	N/A		
Rotation (viewed from flywheel)	Anti-clockwise, viewed from flywheel		
Total lubricating oil capacity, litres (US gal)	8.4 (2.2)		
Cooling system	Watercooled		
Total coolant capacity, litres (US gal)	16.5 (4.3)	17 (4.5)	

Technical information

Model	Speed	Type of Operation	Engine Power		Typical Generator Output* (Net)		Prime Fuel Consumption			
			Gross	Net			110%	100%	75%	50%
	rpm		kW (hp)	kW (hp)	kVA	kWe	g/kWh	g/kWh	g/kWh	g/kWh
1104D-E44TG1	1800	Prime	65 (87)	63 (85)	68	55	231	236	249	276
		Standby	71 (96)	70 (94)	60	75				
1104D-E44TAG1	1500	Prime	78 (105)	74 (99)	80	64	212	215	225	231
		Standby	86 (115)	81 (109)	88	70				
	1800	Prime	89 (120)	85 (114)	91	73	221	224	238	258
		Standby	98 (132)	93 (124)	100	80				
1104D-E44TAG2	1500	Prime	96 (128)	91 (122)	100	80	205	207	221	236
		Standby	105 (141)	101 (135)	110	88				
	1800	Prime	110 (147)	104 (140)	114	91	215	216	232	253
		Standby	120 (161)	115 (154)	125	100				

*Generator powers are typical and based on typical alternator efficiencies and a power factor (cos θ) or 0.8.

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Standard equipment

	Model		
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Electro unit or ElectropaK	ElectropaK	ElectropaK	ElectropaK
Radiator fitted	✓	✓	✓
Fuel filter, engine mounted	✓	✓	✓
Water separator	✓	✓	✓
Fuel priming pump (manual/electric)	Manual	Manual	Manual
Fuel cooler (not required for most installations)	N/A	N/A	N/A
Air filter, engine mounted	✓	✓	✓
Engine ECM, engine mounted	✓	✓	✓
Wiring harness to ECM	✓	✓	✓
Wiring harness (all connectors to single customer interface)	N/A	N/A	N/A
Starter motor	✓	✓	✓
Battery charging alternator	✓	✓	✓
Flywheel housing	✓	✓	✓
Flywheel	✓	✓	✓
Fan	✓	✓	✓
Fan guard	✓	✓	✓
Temperature and oil pressure for automatic stop/alarm configurable	✓	✓	✓

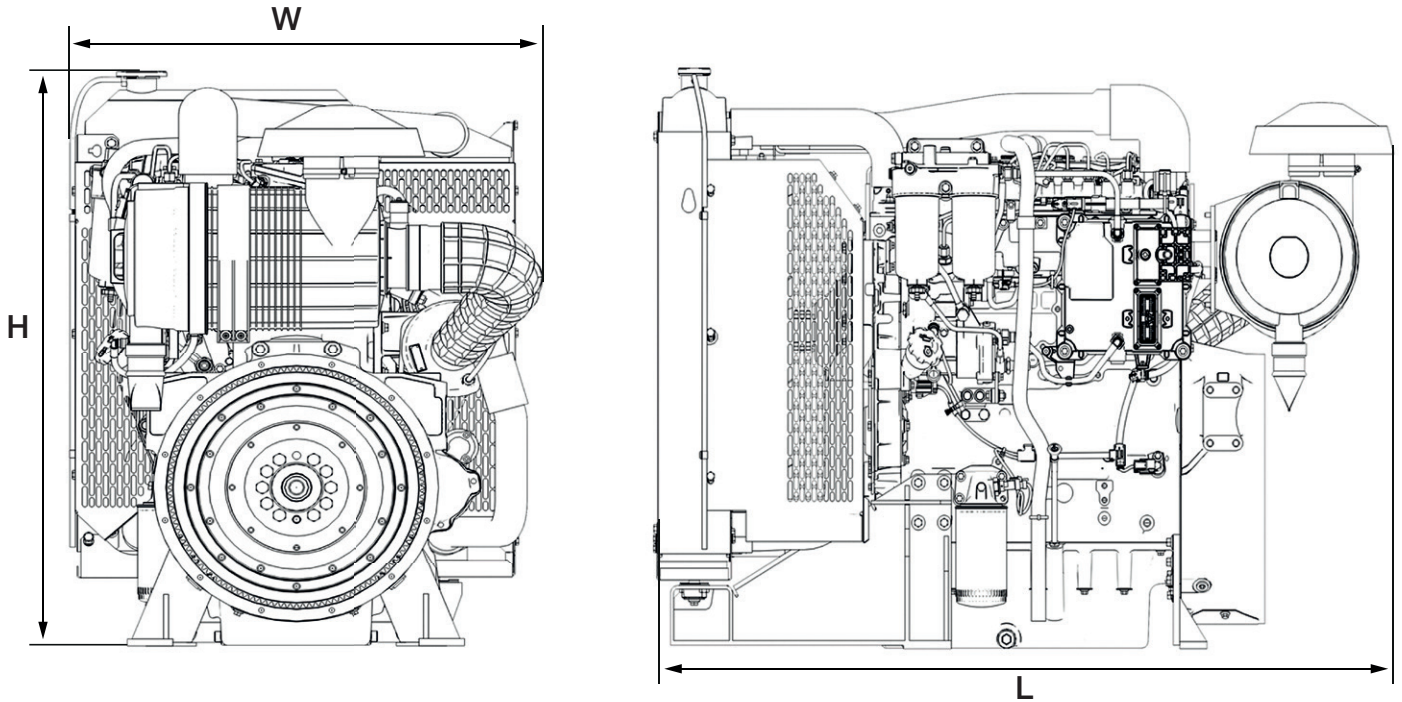
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Engine package weights and dimensions



	Model		
	1104D-E44TG1	1104D-E44TAG1	1104D-E44TAG2
Configuration	ElectropaK		
Dimensions, H x L x W, mm (in)	967 x 1280 x 717 (38 x 50.4 x 28.2)	1087 x 1358 x 746 (42.8 x 53.4 x 29.4)	
Dry weight, kg (lb)	439 (968)		

Prime power: Power available at variable load in lieu of a main power network. Overload of 10% is permitted for 1 hour in every 12 hours of operation.

Standby (maximum): Power available at variable load in the event of a main power network failure. No overload is permitted.