

# 2806A-E18TAG/TTAG Electric Power Engines

**Power range 1500 rpm** 540-743 kWm (engine gross power)

**Power range 1800 rpm** 568-821 kWm (engine gross power)

**Emissions**

**Fuel optimised**

**Capable of meeting the requirements of TA luft (1986)**

The Perkins 2800 Series is a family of well-proven 6 cylinder 18 litre in-line diesel engines, designed to address today's uncompromising demands within the power generation industry. Developed from a well established heavy-duty industrial core, the engine offers superior performance and reliability.

The 2806A products are developed with dual turbochargers to offer market leading power density and high performance. The high durability core engine allows low cost of ownership and flexible product range to serve both highly regulated and fuel optimised markets.



## Features and benefits

- Built on a robust and successful industrial core, the 2800 series is designed to **maximise durability and reliability**. High compression ratios also ensure class leading cold starting and low emissions result from electronic control of fuel injected. Dual turbochargers provide highly competitive performance at high altitudes.
- Exceptional power to weight ratio and compact size give allows **easier installation, smaller canopy** and cost effective transportation as compared to larger engines. Common engine core allows same mounting locations to **lower canopy design cost** whilst serving multiple markets.
- Mechanically operated unit fuel injectors with electronic control combined with carefully matched turbocharging result in low fuel consumption under all conditions resulting in lowering the **cost of ownership**.
- 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 quality for lowest possible cost wherever your Perkins powered machine is operating in the world. Robust engine design results in long service intervals which result in **lowest maintenance cost**.
- 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 productive life** of your engine.
- Perkins takes pride in manufacturing all products globally to the same **high quality standard**. All of our products are manufactured in world class facilities to ensure highest quality for your peace of mind.

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## Specification

	2806A-E18TA/TTA						
	TAG1A	TAG2	TAG3	TTAG4	TTAG5	TTAG6	TTAG7
Configuration	Electropak						
Cylinders	6 vertical in-line						
Displacement, litres (in <sup>3</sup> )	18.1 (1104)						
Aspiration	Parallel turbocharged and air-to-air chargecooled						
Bore and stroke, mm (in)	145 x 183 (5.7 x 7.2)						
Combustion system	Direct injection						
Compression ratio	14.5:1			14:1			
Exhaust aftertreatment	N/A						
Rotation (viewed from flywheel)	Anti-clockwise, viewed on flywheel						
Total lubricating oil capacity, litres (US gal)	62 (16.4)			68 (18)			
Cooling system	Watercooled						
Total coolant capacity, litres (US gal)	61 (16.1)			110 (29)			

## Technical Information

Model	Speed	Type of Operation	Engine Power		Typical Generator Output* (Net)		Prime Fuel Consumption			
			Gross	Net			110%	100%	75%	50%
	rpm		kWm (hp)	kWm (hp)	kVA	kWe	g/kWh	g/kWh	g/kWh	g/kWh
2806A-E18TAG1A	1500	Prime	540 (724)	522 (700)	600	480	201	203	199	203
		Standby	593 (795)	574 (770)	660	528				
	1800	Prime	568 (762)	543 (728)	625	500	203	202	201	210
		Standby	623 (835)	598 (802)	687	550				
2806A-E18TAG2	1500	Prime	584 (783)	565 (758)	650	520	203	202	198	201
		Standby	628 (842)	609 (817)	700	560				
	1800	Prime	568 (762)	543 (728)	625	500	203	202	201	210
		Standby	623 (835)	598 (802)	687	550				
2806A-E18TAG3	1500	Prime	540 (724)	522 (700)	600	480	197	198	204	204
		Standby	584 (783)	565 (758)	650	520				
	1800	Prime	618 (828)	592 (794)	681	545	208	209	202	210
		Standby	678 (909)	652 (874)	750	600				

\*Generator powers are typical and based on typical alternator efficiencies and a power factor (cos  $\theta$ ) of 0.8.

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## Technical Information cont/d

Model	Speed	Type of Operation	Engine Power		Typical Generator Output* (Net)		Prime Fuel Consumption			
			Gross	Net			110%	100%	75%	50%
	rpm		kWm (hp)	kWm (hp)	kVA	kWe	g/kWh	g/kWh	g/kWh	g/kWh
2806A-E18TTAG4	1500	Prime	623 (835)	595 (798)	706	565	195	195	191	196
		Standby	685 (919)	657 (881)	780	624				
	1800	Prime	720 (965)	675 (905)	802	642	206	206	198	197
		Standby	793 (1063)	748 (1003)	888	710				
2806A-E18TTAG5	1500	Prime	676 (907)	648 (869)	770	616	202	200	192	194
		Standby	743 (996)	716 (905)	850	680				
	1800	Prime	720 (965)	675 (929)	802	642	206	206	198	197
		Standby	793 (1063)	748 (1003)	888	710				
2806A-E18TTAG6	1800	Prime	716 (905)	685 (919)	813	650	203	204	196	198
		Standby	785 (1053)	754 (1011)	895	716				
2806A-E18TTAG7	1800	Prime	747 (1002)	716 (905)	850	680	207	209	197	197
		Standby	821 (1101)	790 (1059)	938	750				

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## Standard Equipment

	2806A-E18TA/TTA						
	TAG1A	TAG2	TAG3	TTAG4	TTAG5	TTAG6	TTAG7
Electro unit or electropaK	ElectropaK	ElectropaK	ElectropaK	ElectropaK	ElectropaK	ElectropaK	ElectropaK
Radiator fitted	✓	✓	✓	✓	✓	✓	✓
Fuel filter, engine mounted	✓	✓	✓	✓	✓	✓	✓
Water separator	✓	✓	✓	✓	✓	✓	✓
Fuel priming pump (manual/electric)	✓	✓	✓	✓	✓	✓	✓
Fuel cooler (not required for most installations)	✓	✓	✓	✓	✓	✓	✓
Air filter, engine mounted	✓	✓	✓	✓	✓	✓	✓
Engine ECM, engine mounted	✓	✓	✓	✓	✓	✓	✓
Wiring harness to ECM	✓	✓	✓	✓	✓	✓	✓
Wiring harness (all connectors to single customer interface)	✗	✗	✗	✗	✗	✗	✗
Starter motor	✓	✓	✓	✓	✓	✓	✓
Battery charging alternator	✓	✓	✓	✓	✓	✓	✓
Flywheel housing	✓	✓	✓	✓	✓	✓	✓
Flywheel	✓	✓	✓	✓	✓	✓	✓
Fan	✓	✓	✓	✓	✓	✓	✓
Fan guard	✓	✓	✓	✓	✓	✓	✓
Temp and oil pressure for automatic stop/alarm configurable	✓	✓	✓	✓	✓	✓	✓

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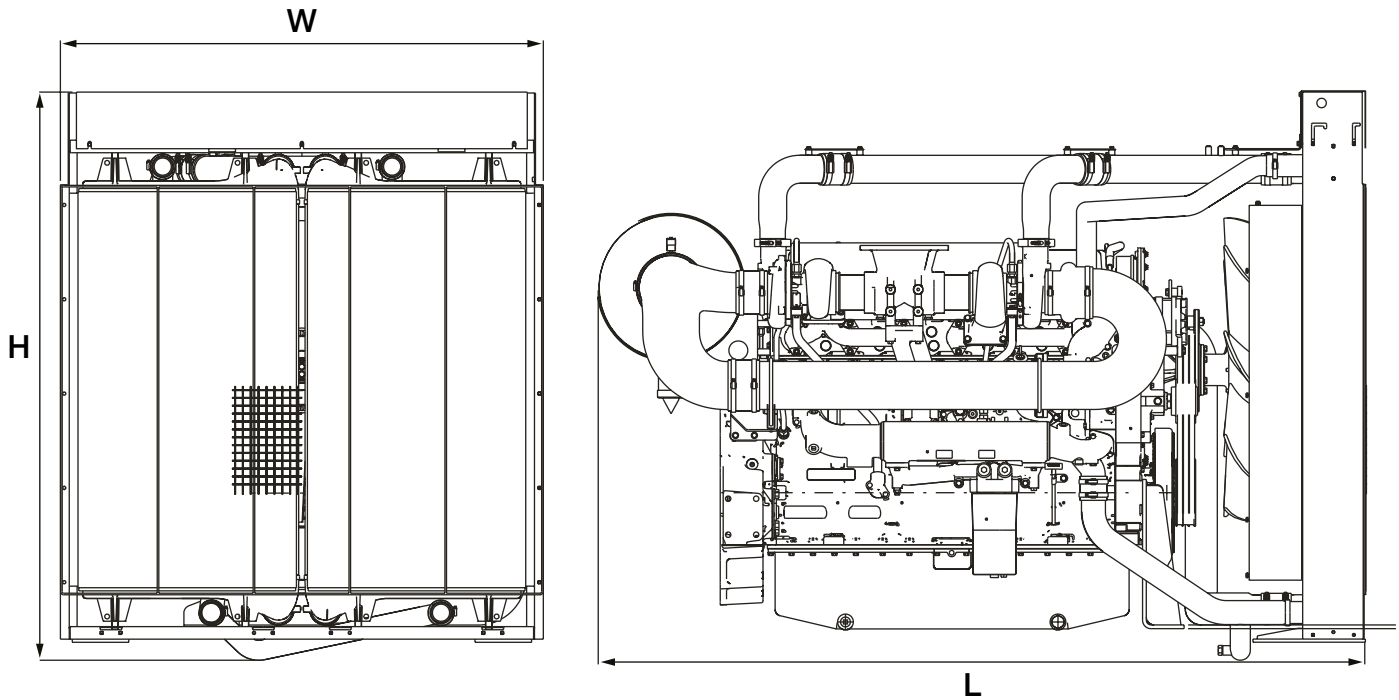
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## Engine Package Weights and Dimensions



	2806A-E18TA/TTA						
	TAG1A	TAG2	TAG3	TTAG4	TTAG5	TTAG6	TTAG7
Configuration	ElectropaK			ElectropaK			
Dimensions, H x L x W, mm (in)	1808 x 2545 x 1536 (71 x 100 x 60)			2126 x 2538 x 1691 (84 x 100 x 67)			
Dry weight, kg (lb)	2050 (4520)			2361 (5206)			

Prime power: Power available at variable load in lieu of a main power network. Overload of 10% is permitted for one 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.

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