

1706J-E93TAG1 Electric Power Engines

Power range 1500 rpm

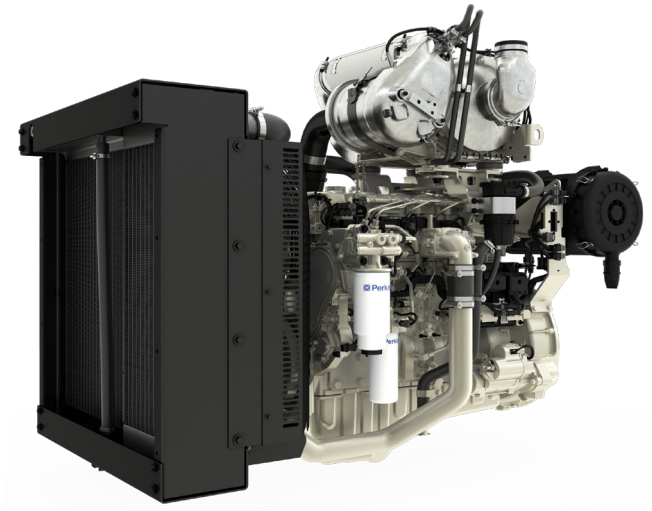
231-254 kW (engine gross power)

Emissions

EU Stage V/U.S. EPA Tier 4 Final

The Perkins® 1700 Series is engineered to provide class-leading performance and maximise competitive advantage for our customers.

Developed on the latest generation 9.3 litre core, the 1706 offers greater capability and more flexibility to our customers from a simple plug and play product.



Features and benefits

- **Maximised productivity** by achieving key power nodes with clean rapid starting in all conditions whilst delivering impressive steady state and transient response. Options between EU Stage V certified products for the EU mobile generator set market and U.S. EPA Tier 4 Final certified products for the U.S. mobile genset market ensures flexibility for our customers tailored to their needs.
- Exceptional power density enables standardisation across numerous applications providing ease of **integration and service accessibility**. Better packaging options ship loose or engine mounted aftertreatment. Simplified aftertreatment solution compatible with switchable Stage V and Tier 4 Final solution.
- The 1700 Series offers optimised fuel consumption and low oil consumption whilst meeting Stage V and Tier 4 Final emission standards; all delivered from a proven reliable core engine delivering **low daily operating costs**.
- Perkins engines are designed and developed with our customer in mind. Keeping service cost to a minimum enables **low periodic running costs**. This is achieved through 500 hour service intervals for oil and fuel as standard under all operating conditions.
- The **long productive life** of our products is supported through the Perkins 12 month warranty as standard for prime power applications, and the 1500 hour or two year emissions warranty. For further peace of mind, there is also the option to extend the warranty period through **Perkins® Platinum Protection**. Contact your local distributor or visit www.perkins.com/platinumprotection.
- Engines are produced using the Caterpillar Production System established in all Perkins manufacturing operations, achieving the same **efficient processes** and **stringent quality controls** at every global facility.

1706J-E93TAG1 Electric Power Engines

Power range 1500 rpm

231-254 kW (engine gross power)

Emissions

EU Stage V/U.S. EPA Tier 4 Final

Specification

	Model
	1706J-E93TAG1
Configuration	ElectropaK
Cylinders	6 vertical in-line
Displacement, litres (in ³)	9.3 (567.5)
Aspiration	Turbocharged aftercooled
Bore and stroke, mm (in)	115 × 149 (4.5 × 5.9)
Combustion system	Direct injection
Compression ratio	17.0:1
Exhaust aftertreatment	DOC/DPF/SCR/AMOX+DEF system
Rotation (viewed from flywheel)	Anti-clockwise
Total lubricating oil capacity, litres (US gal)	26-30 (6.9-7.9)
Cooling system	Liquid
Total coolant capacity, litres (US gal)	38 (10.0)

Technical Information

Model	Speed	Type of operation	Engine Power		Typical Generator Output* (Net)		Prime Fuel Consumption				
			Gross	Net			110%	100%	75%	50%	25%
	rpm		kW (hp)	kW (hp)	kVA	kWe	g/kWh	g/kWh	g/kWh	g/kWh	g/kWh
1706J-E93TAG1	1500	Prime	231 (310)	221 (296)	263	210	201	201	203	212	246
		Standby	254 (341)	244 (326)	290	232					

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

1706J-E93TAG1 Electric Power Engines

Power range 1500 rpm

231-254 kW (engine gross power)

Emissions

EU Stage V/U.S. EPA Tier 4 Final

Standard Equipment

	Model
	1706J-E93TAG1
Electro unit or ElectropaK	ElectropaK
Radiator fitted	✓
Fuel filter, engine mounted	✓
Water separator	N/A
Fuel priming pump (manual/electric)	Electric
Fuel cooler (not required for most installations)	N/A
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	✓
Temperature and oil pressure for automatic stop/alarm configurable	✓

Aftertreatment

	Model
	1706J-E93TAG1
Aftertreatment configuration	Engine Mounted Aftertreatment (EMAT) or ship loose
Aftertreatment type	DOC/DPF/SCR/AMOX+DEF system
Exhaust flexible pipe (engine to aftertreatment)	Fitted when engine mounted (shipped loose options available)
DEF tank	Standard fill (65.6 or 92.6 litres options available)
Heated DEF lines	Yes

1706J-E93TAG1 Electric Power Engines

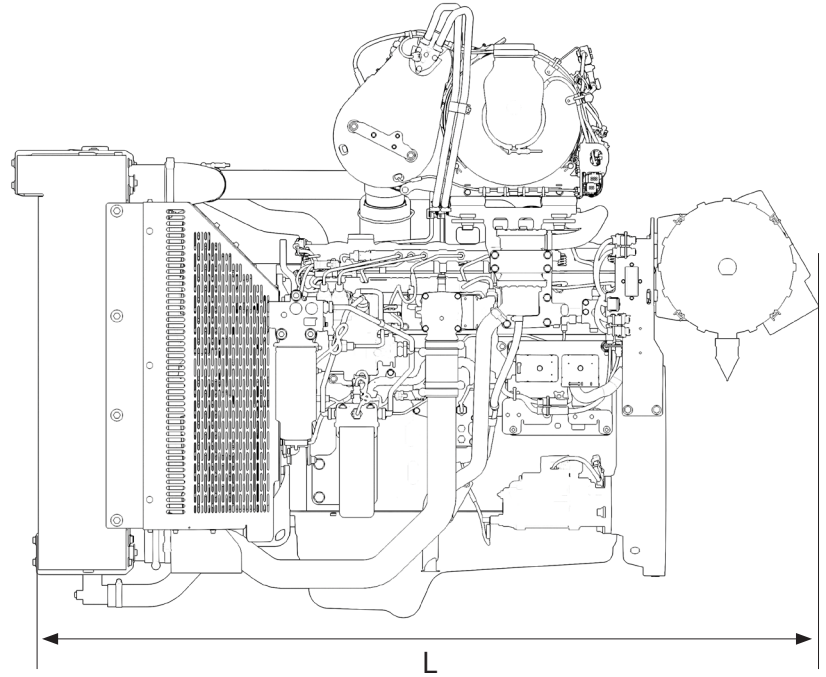
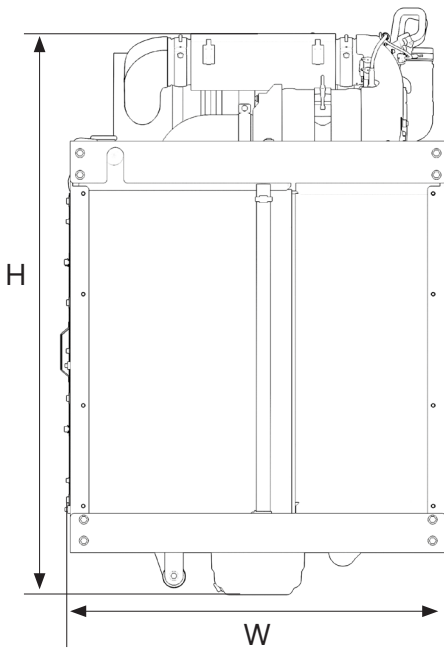
Power range 1500 rpm

231-254 kW (engine gross power)

Emissions

EU Stage V/U.S. EPA Tier 4 Final

Engine Package Weights and Dimensions



	Model
	1706J-E93TAG1
Configuration	Electropak
Dimensions, H x L x W, mm (in)	1645 × 2129 × 1045 (64.8 × 83.8 × 41.1)
Dry weight, kg (lb)	1196 (2637)

Prime power: Unlimited hours usage with an average load factor of 80 percent of the published prime power over each 24 hour period. A 10 percent overload is available for one hour in every 12 hours operation. No overload is permitted.

Standby power: Limited to 500 hours annual usage with an average load factor of 80 percent of the published standby power over each 24 hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted.