

1706J-E93TAG Electric Power Engines

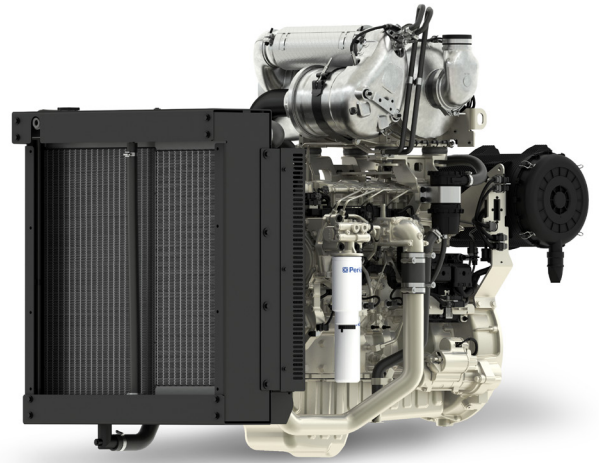
Power range 1500 rpm 231-302 kWm (engine gross power)

Power range 1800 rpm 307-338 kWm (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 a 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 genset market and U.S. EPA Tier 4 Final certified products for the US 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 the Stage V and Tier 4 Final emissions 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 ensures **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 purchase Extended Service Contracts through Perkins Platinum Protection. Contact your local distributor or visit www.perkins.com/en_GB/aftermarket/perkins-platinum-protection.
- 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.

Photographs are for illustrative purposes only and may not reflect final specification. All information in this document is substantially correct at time of printing and may be altered subsequently. Final weight and dimensions will depend on completed specification. Information subject to selected configuration, and subject to change without notice.

PN3238/07/20 Produced in England ©2020 Perkins Engines Company Limited

 **Perkins**®

THE HEART OF EVERY GREAT MACHINE

1706J-E93TAG Electric Power Engines

Power range 1500 rpm 231-302 kWm (engine gross power)

Power range 1800 rpm 307-338 kWm (engine gross power)

Emissions EU Stage V, U.S. EPA Tier 4 Final

Specification

	Model	
	1706J-E93TAG1	1706J-E93TAG2
Configuration	Electropak	
Cylinders	6 vertical in-line	
Displacement, litres (in ³)	9.29 (567)	
Aspiration	Turbocharged aftercooled	
Bore and stroke, mm (in)	115 x 149 (4.5 x 5.9)	
Combustion system	Direct injection	
Compression ratio	17	
Exhaust aftertreatment	DOC/DPF/SCR/AMOX+DEF system	
Rotation (viewed from flywheel)	Anti-clockwise, viewed on flywheel	
Total lubricating oil capacity, litres (US gal)	27-30 (7-7.9)	
Cooling system	Liquid	
Total coolant capacity, litres (US gal)	37.9 (10)	

Technical information

Model	Speed	Type of Operation	Engine Power		Typical Generator Output* (Net)		Prime Fuel Consumption				
			Gross	Net			110%	100%	75%	50%	25%
	rpm		kWm (hp)	kWm (hp)	kVA	kWe	g/kWh	g/kWh	g/kWh	g/kWh	g/kWh
1706J-E93TAG1	1500	Prime	231 (310)	221 (296)	257	206	201	201	203	212	246
		Standby	254 (341)	244 (326)	284	277					
1706J-E93TAG2	1500	Prime	274 (367)	265 (355)	305	244	205	203	200	206	234
		Standby	302 (405)	293 (393)	336	269					
	1800	Prime	307 (412)	291 (390)	334	267	209	206	203	211	244
		Standby	338 (453)	321 (430)	369	296					

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

1706J-E93TAG Electric Power Engines

Power range 1500 rpm 231-302 kWm (engine gross power)

Power range 1800 rpm 307-338 kWm (engine gross power)

Emissions EU Stage V, U.S. EPA Tier 4 Final

Standard equipment

	Model	
	1706J-E93TAG1	1706J-E93TAG2
Electro unit or electropaK	ElectropaK	ElectropaK
Radiator fitted	✓	✓
Fuel filter, engine mounted	✓	✓
Water separator	N/A	N/A
Fuel priming pump (manual/electric)	Electric	Electric
Fuel cooler	N/A	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	✓	✓
Temp and oil pressure for automatic stop/alarm configurable	✓	✓

Aftertreatment

	Model	
	1706J-E93TAG1	1706J-E93TAG2
Aftertreatment configurations	Engine Mounted Aftertreatment (EMAT) or ship loose	
Aftreatment type	DOC/DPF/SCR/AMOX+DEF system	
Size and orientation	13" CEM, horizontal or vertical options available	
DEF tanks	Standard fill, 65.6 litres or 92.6 litres options available	

Photographs are for illustrative purposes only and may not reflect final specification.
 All information in this document is substantially correct at time of printing and may be altered subsequently.
 Final weight and dimensions will depend on completed specification.
 Information subject to selected configuration, and subject to change without notice.

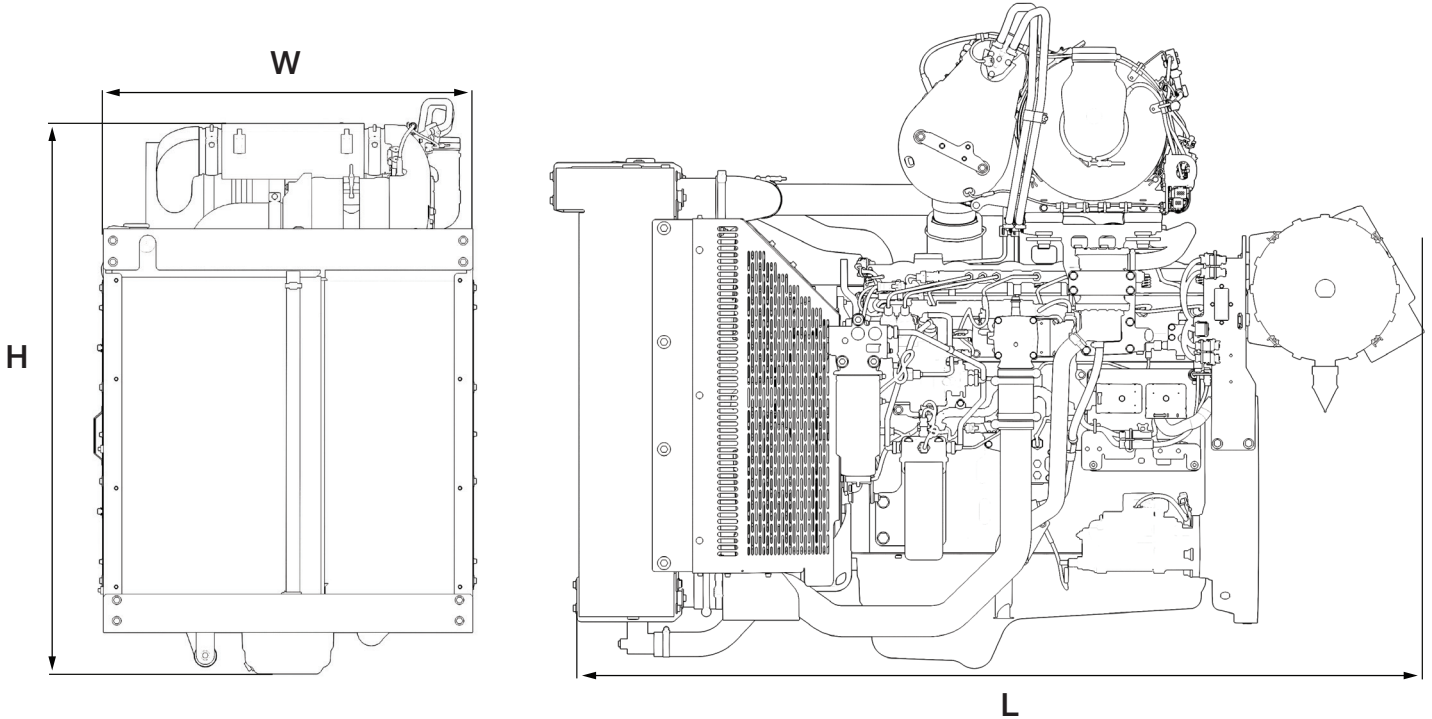
1706J-E93TAG Electric Power Engines

Power range 1500 rpm 231-302 kWm (engine gross power)

Power range 1800 rpm 307-338 kWm (engine gross power)

Emissions EU Stage V, U.S. EPA Tier 4 Final

Engine package weights and dimensions



	Model	
	1706J-E93TAG1	1706J-E93TAG2
Configuration	Electropak	
Dimensions, H x L x W, mm (in)	1645 x 2129 x 1045 (65 x 84 x 41)	
Dry weight, kg (lb)	1196 (2637)	

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.

Photographs are for illustrative purposes only and may not reflect final specification.
All information in this document is substantially correct at time of printing and may be altered subsequently.
Final weight and dimensions will depend on completed specification.
Information subject to selected configuration, and subject to change without notice.