Power range 1500 rpm 274-302 kW (engine gross power)
Power range 1800 rpm 307-338 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.



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#### Specification

	Model
	1706J-E93TAG2
Configuration	ElectropaK
Cylinders	6 vertical in-line
Displacement, litres (in³)	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**

	Speed Type of	Engine Power		Typical		Prime Fuel Consumption					
Model		of	Gross	Net	Generator Output* (Net)		110%	100%	75%	50%	25%
	rpm	operation	kW (hp)	kW (hp)	kVA	kWe	g/kWh	g/kWh	g/kWh	g/kWh	g/kWh
	1500	Prime	274 (367)	265 (355)	312	249	205	203	200	206	234
		Standby	302 (405)	292 (392)	343	275					
1706J-E93TAG2	1800	Prime	307 (412)	291 (390)	341	273	209	000	203	211	244
		Standby	338 (453)	321 (430)	377	302		206			

<sup>\*</sup>Generator powers are typical and based on typical alternator efficiencies and a power factor ( $\cos\theta$ ) or 0.8.



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#### Standard Equipment

	Model
	1706J-E93TAG2
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

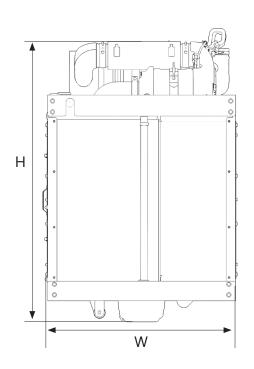
	Model
	1706J-E93TAG2
Aftertreatment configuration	Engine Mounted Aftertreatment (EMAT) or ship loose
Aftertreatment type	DOC/DPF/SCR/AMOX+DEF system
Exhaust flexible pipe (engine to aftertreatment)	Fitted when engine mounted (shipped loose options available)
DEF tank	Standard fill (65.6 or 92.6 litres options available)
Heated DEF lines	Yes

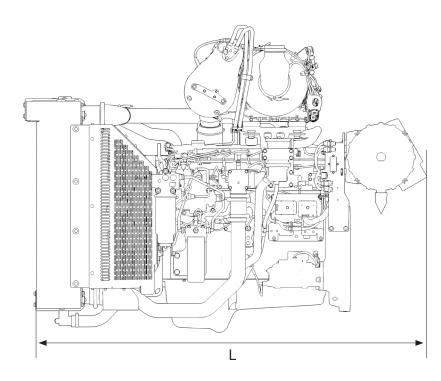


Power range 1500 rpm 274-30 Power range 1800 rpm 307-33 Emissions EU Sta

274-302 kW (engine gross power) 307-338 kW (engine gross power) EU Stage V/U.S. EPA Tier 4 Final

#### **Engine Package Weights and Dimensions**





	Model
	1706J-E93TAG2
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 power over each 24 hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted.

