

1706D Electric Power Engines

Power range 1800 rpm 294-354 kWm (engine gross power)

Emissions U.S. EPA Tier 3

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

- A high power density product that combines dependable power and high efficiency coupled with proven core engine designs assures **maximum durability, reliability** and quiet operation.
- Designed to provide more flexibility to our customers and offer a simple plug and play product allowing for **easier installation**.
- With fuel consumption optimized to both prime power and continuous running applications and the requirement for no additional fluids or additives result in **lower cost of ownership**.
- Throughout the life of a Perkins engine, we provide access to genuine OE specification parts along with vee belts and 500-hour oil change intervals enabling **low-cost maintenance**.
- Perkins offer a range of flexible solutions to help provide appropriate support, either to the OEM's network or directly to the machine customer. Our information systems enable our distributors to quickly diagnose engine faults and identify the right parts supported by the Perkins logistics operation ability to dispatch more than 45,000 different parts from stock, reaching the customer within 24 hours helping to **maximise 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.

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.

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 **Perkins®**

THE HEART OF EVERY GREAT MACHINE

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Specification

| | Model | |
|---|------------------------------------|---------------|
| | 1706D-E93TAG1 | 1706D-E93TAG2 |
| Configuration | ElectropaK | |
| Cylinders | 6 vertical in-line | |
| Displacement, litres (in ³) | 9.29 (567) | |
| Aspiration | Turbocharged aftercooled | |
| Bore and stroke, mm (in) | 114 x 149 (4.5 x 5.9) | |
| Combustion system | Direct injection | |
| Compression ratio | 16.5:1 | |
| Exhaust aftertreatment | N/A | |
| Rotation (viewed from flywheel) | Anti-clockwise, viewed on flywheel | |
| Total lubricating oil capacity, litres (US gal) | 26-30 (6.9-7.9) | |
| Cooling system | Liquid | |
| Total coolant capacity, litres (US gal) | 35.8 (9.5) | |

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 |
| 1706D-E93TAG1 | 1800 | Prime | 267 (358) | 254 (341) | 292 | 234 | 213 | 215 | 224 | 246 | 259 |
| | | Standby | 294 (394) | 281 (377) | 323 | 259 | | | | | |
| 1706D-E93TAG2 | 1800 | Prime | 322 (432) | 309 (415) | 356 | 284 | 215 | 217 | 218 | 235 | 253 |
| | | Standby | 354 (475) | 341 (458) | 393 | 314 | | | | | |

*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 | |
|--|---------------|---------------|
| | 1706D-E93TAG1 | 1706D-E93TAG2 |
| Electro unit or electropaK | ElectropaK | ElectropaK |
| Radiator fitted | ✓ | ✓ |
| Fuel filter, engine mounted | ✓ | ✓ |
| Water separator | ü | ü |
| Fuel priming pump (manual/electric) | Manual | Manual |
| 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 | ✓ | ✓ |

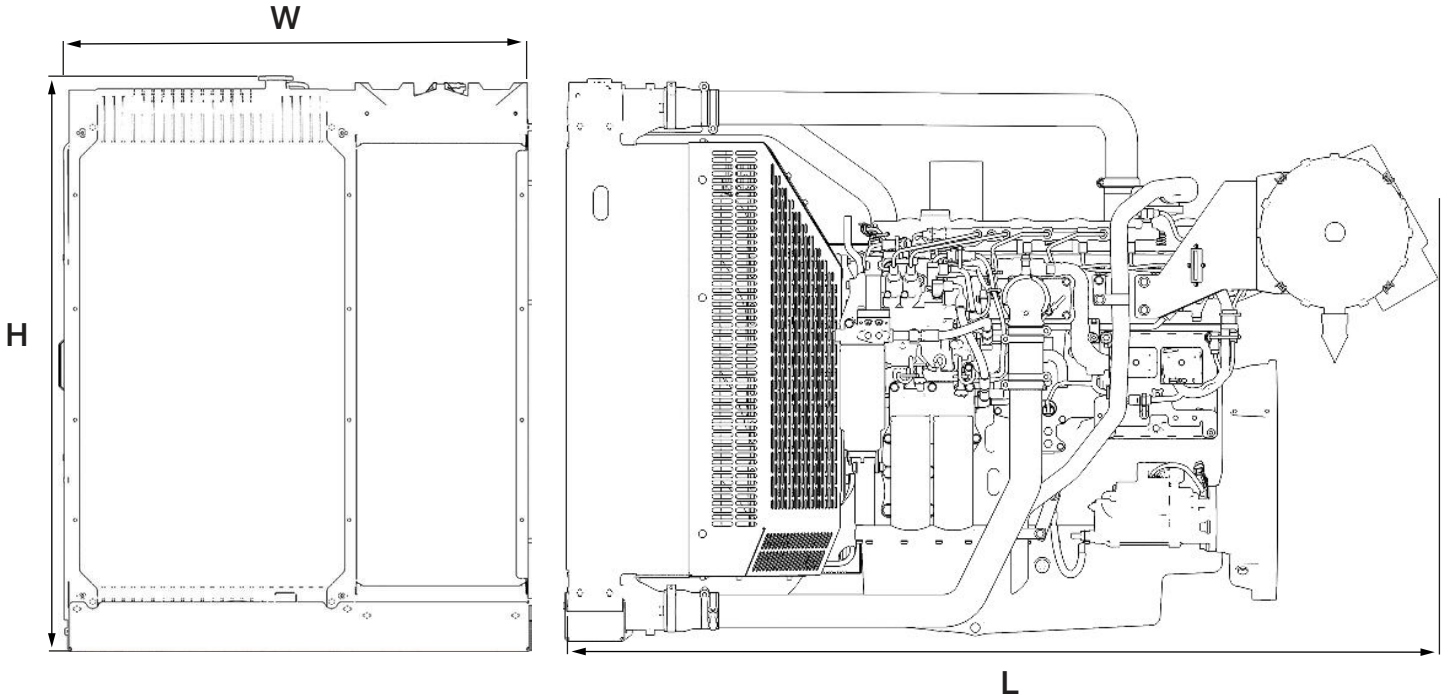
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Engine package weights and dimensions



| | Model | |
|-----------------------------------|---|---------------|
| | 1706D-E93TAG1 | 1706D-E93TAG2 |
| Configuration | Electropak | |
| Dimensions, H x L x W, mm (in) | 1311 x 2083 x 1091 (51.6 x 81.9 x 42.9) | |
| Dry weight, kg (lb) | 1070 (2359) | |

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.

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