

# 1100 Series 1106D-E70TA IOPU

116-205 kW (156-275 bhp)

Designed to meet EU Stage IIIA / U.S. EPA Tier 3 emissions, the Perkins® 1106D-E70TA is the latest addition to the common platform concept of 1100 Series diesel engines.

This new engine will give you increased delivered power, torque and noise reduction. These improvements have been achieved through changes to the manifold and combustion areas, turbocharger geometry, increased cylinder displacement and significantly, the inclusion of a high pressure, common rail fuel system.

The 1104D IOPU range of engines have a complete fuel system, air cleaner and radiator fitted as standard along with a choice of mechanical or electronic control system, making these the ultimate power solution.



## Powered by your needs

- The Perkins 1106D-E70TA delivers up to 205 kW (275 hp) and over 1000 Nm (770 lb-ft) of torque, providing greater productivity through an improved power to weight ratio.
- The 1106D-E70TA IOPU offers a choice of build configurations to match the power needs of customers for a diverse range of applications, including a range of SAE 1, 2 and 3 flywheel housings, enabling the product to be tailored to specific customer needs.

## State-of-the-art Design

- The 1106D-E70TA IOPU incorporates the latest common rail fuel system technologies with a closely optimised air-management system which is overseen by the latest generation of electronic engine control. This allows the 1106D-E70 range to deliver high power density and excellent fuel economy with low exhaust emissions and the minimum of heat rejection.

## Worldwide power solution

- Excellent fuel economy and low heat rejection, allowing customers to use a more compact cooling group.
- The new common rail fuel system delivers world-class robustness and packaged with the new filtration system, excellent tolerance to the different fuel qualities around the world. These fuels include aviation and biofuel (using biofuel that complies with Perkins standards). Options are available to meet local market needs.
- Noise levels have been reduced from the previous 6 cylinder model by up to 1 dB at low idle.

## Lower installation costs

- The Perkins 1106D-E70TA maintains the same package size and variety of hook-up points as the current 1100 Series and 1200 Series platforms. This commonality reduces the cost impact for the customer during the changeover process.

## Lower operating costs

- The 1106D maintains Tier 2 / Stage II fuel economy. This will allow many customers to keep existing fuel tanks, avoiding the need for costly redesign.
- Service intervals are set at 500 hours as standard and Perkins provides comprehensive warranty cover for two years (up to 3,000 hours), with three years on major engine components.
- A low usage warranty package is also available.

## Long-term power solution

The 1106D range has been designed to fully comply with stringent Tier 3 / Stage IIIA emissions regulations, providing an emissions compliant power solution for the future.

## Product support

- With highly trained Perkins distributors in thousands of communities in over 180 countries, you are never far away from expert product knowledge, genuine parts and a range of advanced diagnostic technology for keeping your engine in peak condition.
- **Warranties and Service Contracts**  
We provide two-year warranties for variable speed models, as standard. These are supported by multilevel Extended Service Contracts that can be bought additionally.

Discover more

[www.perkins.com](http://www.perkins.com)

[www.perkins.com/esc](http://www.perkins.com/esc)

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To find your local distributor

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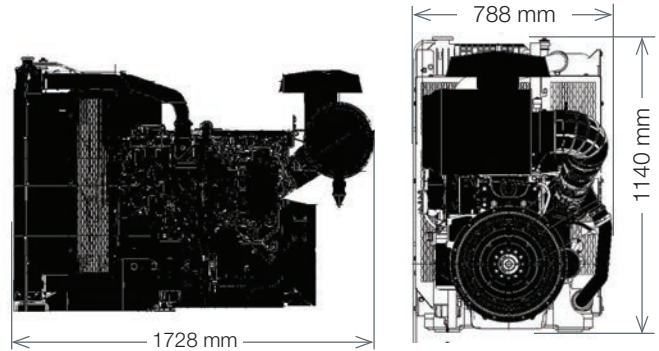
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THE HEART OF EVERY GREAT MACHINE

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116-205 kW (156-275 bhp)



## Standard IOPU specification

### Air inlet

Mounted air filter and turbocharger

### Cooling system

Fan (pusher or puller)

Fan drive

Radiator

Water pump

### Electrical equipment

Alternator (12 or 24 volt)

Starter motor (12 or 24 volt)

### Flywheel and housing

Flywheel

SAE 3, 2, 1 flywheel housing

### Fuel system

Fuel filter

### Lubrication system

Oil cooler and filter

Timing case oil filler

### Mountings

Engine mounting brackets

### PTO capability

SAE A front PTO

### Starting aids

Glow plugs

### Option groups

The 1106D-E70TA IOPU offers a wide choice of standard build specifications to meet specific customer needs:

12 or 24 volt alternator

Pusher or puller fan

SAE A front PTO (147 Nm continuous/210 Nm intermittent)

## Engine data

Number of cylinders ..... Vertical in-line 6 cylinder

Bore and stroke..... 105 x 135 mm (4.13 x 5.3 in)

Displacement ..... 7.01 litres (427.7 cubic in)

Aspiration ..... Turbocharged aftercooled

Cycle..... 4 stroke

Combustion system..... Direct injection

Compression ratio ..... 16.8:1

Engine rotation ..... Anti-clockwise viewed on flywheel

Cooling system..... Liquid

Total lubrication capacity..... 13-16 litres (3.4-4.2 US gal)

Total coolant capacity ..... 15.2 litres (4 US gal)

Dimensions – Length ..... 1728 mm (68 in)

Width ..... 788 mm (31 in)

Height ..... 1140 mm (44.9 in)

Dry weight ..... 788 kg (1737 lbs)

Final weight and dimensions will depend on completed specification

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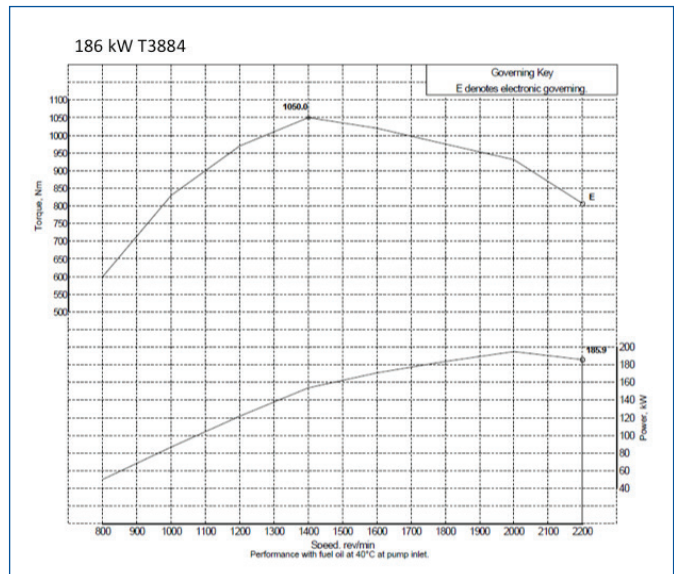
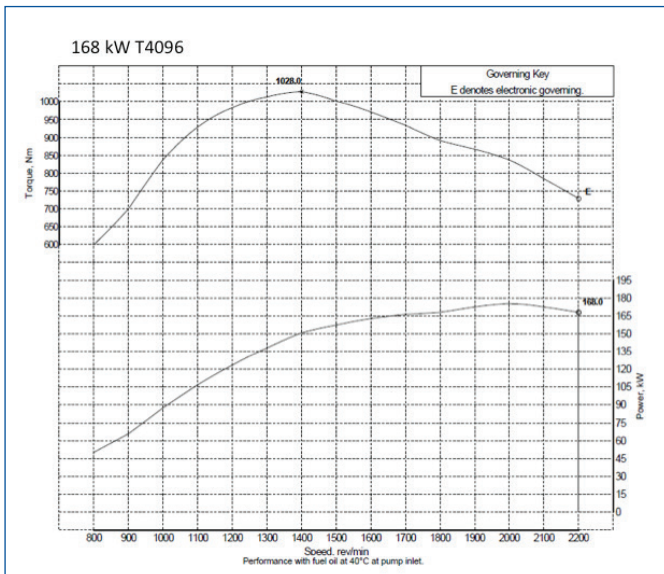
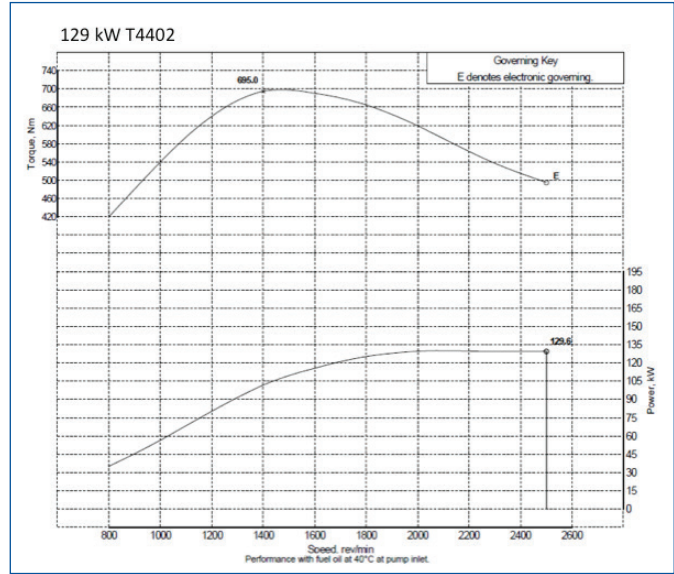
THE HEART OF EVERY GREAT MACHINE

# 1100 Series 1106D-E70TA IOPU

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Aspiration	Power		Torque		Rating Type
	kW (bhp)	Speed (rpm)	Nm (lb-ft)	Speed (rpm)	
TA	116 (156)	2200	706 (520)	1400	C
TA	*129 (173)	2200	800 (590)	1400	C
TA	151 (202)	2200	922 (680)	1400	C
TA	*168 (225)	2200	1028 (758)	1400	C
TA	*186 (249)	2200	1050 (774)	1400	C
TA	205 (275)	2200	1050 (774)	1400	C

\* curve shown



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