



## 400 Series

### 403D-11

#### Industrial Open Power Unit

17.9 kW/24.0 bhp



The Perkins 400D range has been developed in consultation with our market-place. This 1.1 litre, 3 cylinder engine complete with radiator cooled unit, compliments the exciting 400 Series product line-up, offering customers a choice of ultra-compact, lightweight power units whilst maintaining all the customer benefits they can experience from other products in the range.

#### Ultra-compact power

- Up to 17.9 kW from an engine envelope of 0.24m<sup>3</sup>
- Easy installation

#### Clean and quiet

- Noise levels have been kept to a minimum
- Subjective harshness has also been controlled, making the engine sound even quieter

#### Durable and reliable

- Product design and process improvements enhance both engine reliability and durability
- A new improved (advanced) governor, valve seat inserts, and new compliance testing deliver reliability with 6,000 hours durability
- A standard 2 year warranty demonstrates our confidence in durability and reliability of our engines

#### Low operating costs

- Oil and filter changes are now set at 500 hours as standard
- Engine durability and reliability, the warranty offering, and ease of installation combine to drive down the cost of ownership

#### Product support

- Through our global network of experienced distributors and dealers, fully trained engine experts deliver total service support around the clock 365 days a year. They have instant access to a suite of web based tools covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your Perkins engine
- Perkins actively pursues product support excellence by insisting our distribution network invest in their territory to provide you with consistent quality of support
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts giving 100% reassurance that you receive the very best quality for the lowest possible cost .... wherever your Perkins powered machine is operating in the world

Complies with EU Stage IIIA and EPA Tier 4 (below 19 kW), Interim Tier 4 (above 19 kW) for non-road mobile machinery powered by variable speed engines (EPA 40 CFR Part 1039 Tier 4).

The 400 Series engine family continues to set new standards in the compact engine market. Developed alongside customers to fulfil their needs in the construction, materials handling, agricultural/turf, genset and compressor markets, it is another class-leading diesel range from Perkins.

Built to the most demanding standards, the 400D engines meet all the requirements of the off-highway emissions legislation for EU Stage IIIA and USA EPA Tier 4 (below 19 kW), Interim Tier 4 (above 19 kW) and Tier 4.

Perkins IOPUs offer the advantages of an industrial engine, with the convenience of a cost effective cooling and filtration solution. This minimises machine development time and costs, and enables applications to be powered with ease.

The 403D-11 IOPU is a powerful but quiet 1.1 litre packaged unit. It delivers impressive performance with low operating costs in a small, efficient package ideal for a range of industrial applications.

Performance Data	Maximum Power			Maximum Torque		
	Speed rpm	kW	bhp	Nm	lbf.ft	Speed rpm
Net Intermittent	3000	17.9	24.0	64.6	47.6	2100
Net Continuous	3000	15.6	20.9	56.2	41.5	2100
Net Intermittent	2800	17.0	22.8	64.6	47.6	2100
Net Continuous	2800	14.8	19.8	56.2	41.5	2100

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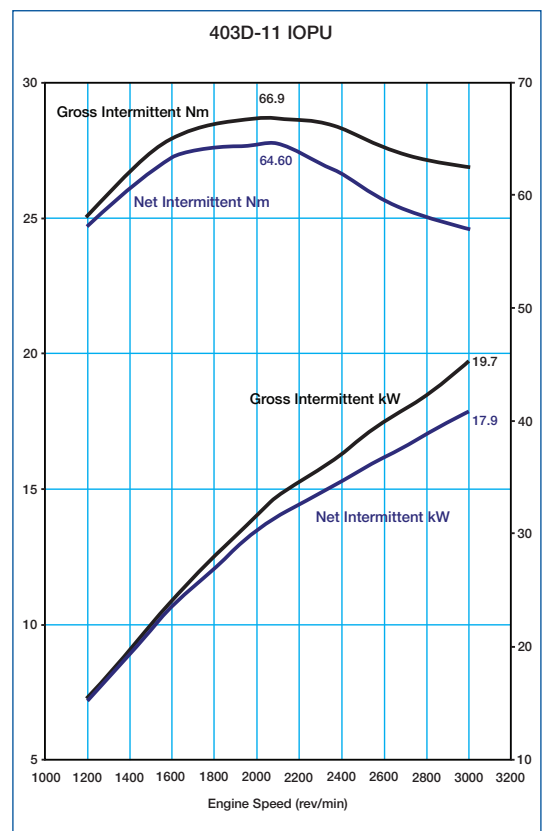
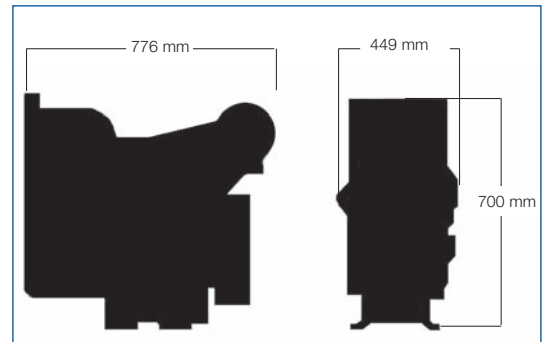
### Engine Specification

- Cast iron engine block
- SAE Flywheel size 6½
- SAE 5 flywheel housing
- Fuel injection pump
- Fuel filter
- Glow plug starting aid
- Lub oil sump
- Spin on lub oil filter
- Inlet manifold
- Cast iron exhaust manifold – side outlet
- Coolant pump belt driven
- Mounted radiator and fan
- Mounted air cleaner
- Starter motor 12 volt
- Alternator 12 volt 65 amp
- ESOS
- Lub oil pressure switch
- Coolant temperature switch

### General Data

Number of cylinders	3 in-line
Bore and stroke	77 x 81 mm
Displacement	1.13 litres
Aspiration	Naturally aspirated
Cycle	4 stroke
Combustion system	Indirect injection
Compression ratio	23.0:1
Rotation	Anti-clockwise viewed on flywheel
Cooling system	Liquid
Total lubrication capacity	4.41 litres
Total coolant capacity	5.21 litres
Dimensions	Length 776 mm Width 449 mm Height 700 mm
Dry weight	116 kg

Final weight and dimensions will depend on completed specification.



Lower speed ratings cannot be read from this curve.



### Perkins Engines Company Limited

Peterborough PE1 5NA  
 United Kingdom  
 Telephone +44 (0)1733 583000  
 Fax +44 (0)1733 582240  
[www.perkins.com](http://www.perkins.com)

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