

# 400 Series 403D-11 Industrial

21.0 kW / 28.2 hp @ 3400 rpm

The Perkins® 400D range has been developed in consultation with our marketplace. This 1.1 litre, 3 cylinder engine complements 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.

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 Stage IIIA and MLIT Step 4.

Long 500 hour service intervals, a two-year standard warranty, low noise and harshness, and a wide range of options make the 400 Series range the complete solution for compact power needs.

The 403D-11 is a very quiet 1.13 litre unit delivering impressive performance with low operating costs in a small, efficient package ideal for a range of off-highway applications.



## Emissions statement

**Industrial and IOPU Engines:** Certified against the requirements of EU Stage IIIA (Directives 97/68/EC as last amended, and 2004/26/EC, as last amended).

**Constant Speed engines for use in Industrial, IOPU and ElectropaK applications:** Certified against the requirements of EU Stage IIIA (Directive 97/68/EC, as last amended for mobile applications).

Specification		
Number of cylinders	3 in-line	
Bore and stroke	77 x 81 mm	3.0 x 3.2 in
Displacement	1.13 litres	69.0 in <sup>3</sup>
Aspiration	Naturally aspirated	
Cycle	4 stroke	
Combustion system	Indirect injection	
Compression ratio	23:1	
Rotation	Anti-clockwise, viewed on flywheel	
Total lubricating capacity	4.9 litres	1.3 US gal
Cooling system	Liquid	
Total coolant capacity	1.9 litres	0.5 US gal

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

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THE HEART OF EVERY GREAT MACHINE

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## Features and benefits

### Ultra-compact power

- Up to 21.0 kW (28.2 bhp) from an engine envelope of 0.11 m<sup>3</sup>
- Easy installation

### Clean and quiet

- Noise levels have been kept to a minimum
- Subjective harshness has been carefully 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 of 6,000 hours
- A standard two-year warranty demonstrates our confidence in durability and reliability

### Low operating costs

- Approved for operation on biodiesel\* concentrations of up to 20%
- Oil and filter changes are 500 hours, dependent on load factor
- Engine durability and reliability, the warranty offering and ease of installation combine to drive down the cost of ownership
- **Warranties and Service Contracts**

We provide one-year warranties for constant speed engines and 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.esc](http://www.perkins.esc)

### 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
- To find your local distributor: [www.perkins.com/distributor](http://www.perkins.com/distributor)

\*Subject to conformance with ASTM D6751 and EN14214

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## Technical information

- Cast iron engine block
- Flywheel and flywheel housing
- Fuel injection pump
- Split element 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
- Alternator 12 volt 15 amp
- ESOS (Electric shut-off solenoid)
- Lub oil pressure switch
- Coolant temperature switch
- SAE A-A PTO
- Choice of cooling fans
- Starter motor 12 volt
- Cold start -20°C (aided)

## Option groups

A selection of optional items is available to enable you to prepare a specification precisely matched to your needs.

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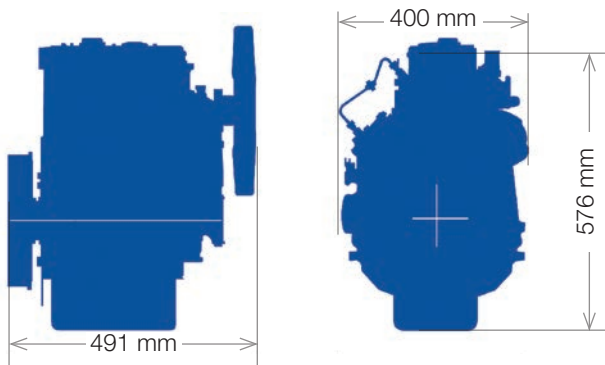
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Engine package weights and dimensions		
Length	491 mm	19.3 in
Width	400 mm	15.7 in
Height	576 mm	22.6 in
Weight (dry)	87 kg	191 lb

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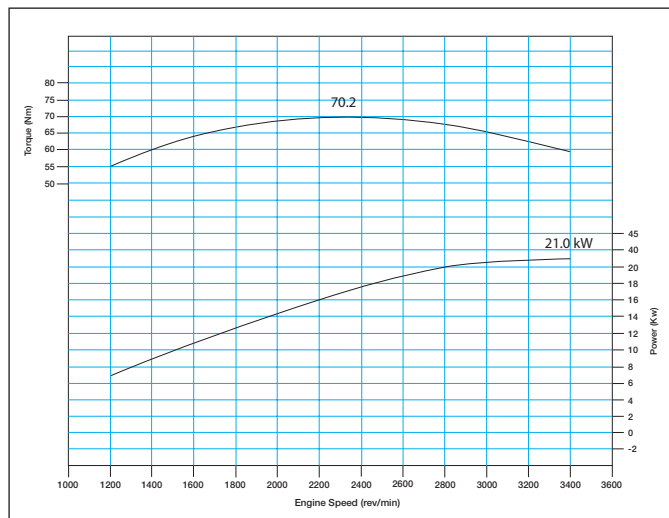
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Lower speed ratings cannot be read from this curve

Performance data	Gross intermittent (ISO/TR 14396)	Speed rpm
Power output (kW)	21.0	3400
Power output (hp)	28.2	3400
Peak torque (Nm)	70.2	2300
Peak torque (lbf-ft)	51.8	2300

Power output for a run-in engine after 60 hours

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