



# 400 Series

## 403D-15

### Compact Industrial and Construction Power

25.1 kW / 33.7 bhp @ 3000 rev/min



The Perkins 400D range has been developed in consultation with our marketplace. This 1.5 litre, 3 cylinder engine complements the exciting 400 Series product line-up, offering customers a choice of compact, lightweight power units whilst maintaining all the customer benefits they can experience from other products in the range.

#### Ultra-compact power

- Up to 25.1 kW from an engine envelope of 0.15 m<sup>3</sup>
- Coolant temperature of 112°C allows reduction in radiator size

#### Clean and quiet

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

#### Durable power

- 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

#### Low operating costs

- Approved for operation on biodiesel\* concentrations of up to 20%
- Oil and filter changes are 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 an experienced global network of distributors and dealers, fully trained engine experts deliver total service support around the clock, 365 days a year. They have a comprehensive suite of web based tools at their fingertips, covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine
- Perkins actively pursues product support excellence by insisting our distribution network invest in their territory to provide you with a consistent quality of support across the globe
- 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 in terms of quality for lowest possible cost... wherever your Perkins powered machine is operating in the world

Certified to Stage IIIA, Tier 4a (19-37 kW) and Tier 4b (<19 kW).

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, gen set 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 EC Stage IIIA/USA EPA Tier 3 and beyond.

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-15 is a very quiet 1.5 litre unit delivering impressive performance and reduced operating costs in a small, efficient package ideal for a range of off-highway applications.

| Performance Data     | Gross Intermittent (ISO/TR 14396) | Speed (rev/min) |
|----------------------|-----------------------------------|-----------------|
| Power Output (kW)    | 25.1                              | 3000            |
| Power Output (bhp)   | 33.7                              | 3000            |
| Peak Torque (Nm)     | 96.0                              | 1800            |
| Peak Torque (lbf ft) | 70.8                              | 1800            |

Power output for a run-in engine after 60 hours.

\*Subject to conformance with ASTM D6751 and EN14214.

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

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### Engine Specification

- Cast iron engine block
- Flywheel and flywheel housing
- CTD fuel injection pump
- Spin on 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
- Choice of cooling fans
- Starter motor 12 volt and 24 volt
- Alternator 12 volt and 24 volt
- ESOS
- Lub oil pressure switch
- Coolant temperature switch
- SAE A PTO
- Cold start to -30°C (aided)
- High and low fan position
- Electronic controlled governing as an option

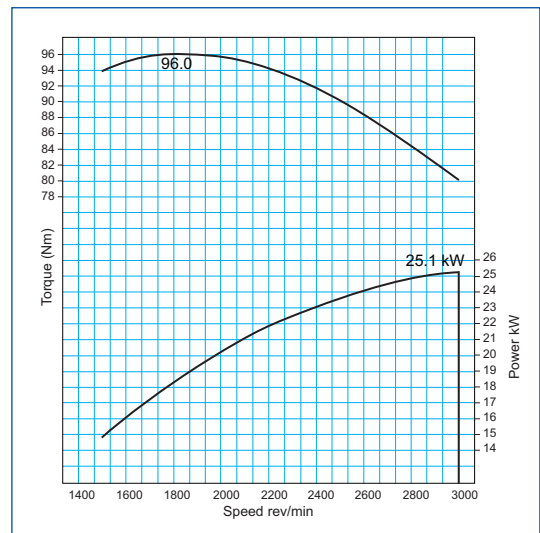
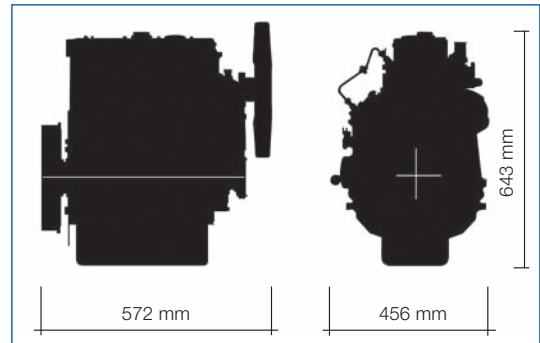
### General Data

|                            |  |
|----------------------------|--|
| Number of cylinders        | 3 in-line                                      |
| Bore and stroke            | 84 x 90 mm                                     |
| Displacement               | 1.496 litres                                   |
| Aspiration                 | Naturally aspirated                            |
| Cycle                      | 4 stroke                                       |
| Combustion system          | Indirect injection                             |
| Compression ratio          | 22.5:1   |
| Rotation                   | Anti-clockwise viewed on flywheel              |
| Cooling system             | Liquid   |
| Total lubrication capacity | 6 litres                                       |
| Total coolant capacity     | 2.4 litres                                     |
| Dimensions                 | Length 572 mm<br>Width 456 mm<br>Height 643 mm |
| Dry weight                 | 149 kg   |

Final weight and dimensions will depend on completed specification.

### Option Groups

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



Lower speed ratings may not be read from this curve.



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