



# 1100 Series

## 1104A-44

50-63,5 kW/67-85 bhp

### Flexibility

- The 1100 Series provides a comprehensive platform of engines that enable OEM's to remain flexible, responsive and competitive
- The 1100 Series offers a choice of emissions and non-emissions compliant models with similar hook-up points. Similarity in envelope size, mounting points, fuel, electrical, gaseous and coolant connection points results in lower design and installation costs for the machine manufacturer

### Commonality

- Using this single platform concept, the 1104A has been aligned with its successful 1104C emissions-compliant cousin
- The use of many common components, reduces parts variety, inventory levels and servicing costs, benefits that can be passed on to the end customer and their servicing outlets

### Performance

- The 1100A engine family meets the demanding needs of markets with no emissions legislation for off-highway machines
- Significant improvements to power, torque and torque back-up

### Lower Operating Costs

- Improved cylinder bore finish and piston ring technology, combined with optimized cylinder head and block design have all contributed to significantly lowering fuel and oil consumption levels

### Quieter

- The new and improved timing gear train, cylinder block design and use of noise deadening materials are just some of the features contributing to reduced bare engine noise across its operating range

### Cleaner

- Reduction in smoke and harmful gaseous emissions from an advanced combustion system design
- Latest gasket and sealing technology ensure a product far cleaner and friendlier to the environment

### Quality by Design

- Perkins follows a rigorous and comprehensive New Product Introduction process to ensure product integrity. Design, testing and manufacturing process improvements have been adopted in the introduction of the new 1100A engine family. The result is a confidence in a product that is reliable and durable for non-emissions legislated markets

### Product Support

- Total worldwide service is provided through a network of 4,000 distributors and dealers.
- TIPSS - The Integrated Parts and Support System enables customers to specify and order parts electronically as well as service engines with on-line guides and service tools.

1104A is a 4 cylinder, 4.4 litre family of naturally aspirated and turbocharged engines. It provides a superior successor to the very popular 1004 and 4.41 products. Driven by the requirements of our customers, it has been tailored to meet the needs of the construction, materials handling, and agricultural non-emission legislated markets.

Designed and built to the most demanding standards, the 1104A brings with it significant improvements in all aspects of the engine's performance and operating characteristics.

The family is complemented by a range of power solutions known as 'Industrial Open Power Units' and 'ElectropaKs.'

The 1104A-44 is a 4.4 litre engine that delivers improved performance and reduced operating costs, in a quiet and efficient package. It is ideal for a wide range of off-highway applications.

In the 1100 Series, Perkins has designed to perform and delivered with choice.

designed to perform  
delivered with choice

| Performance Data     | Gross Intermittent (ISO/TR 14396) | Speed (rev/min) |
|----------------------|-----------------------------------|-----------------|
| Power Output (kW)    | 63.5                              | 2200            |
| Power Output (bhp)   | 85.0                              | 2200            |
| Peak Torque (Nm)     | 293.0                             | 1400            |
| Peak Torque (lbf ft) | 216.0                             | 1400            |

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### Engine Specification

- Cast iron engine block
- Flywheel and flywheel housing
- Glow plug start aid (optional)
- Integral inlet manifold
- Cast iron exhaust manifold
- Gear driven coolant pump
- 12 volt alternator
- Provision for PTOs
- Choice of cooling fans
- 12 volt starter motor
- Choice of lubricating oil sump
- Choice of dipstick positions
- Choices of oil filler positions
- Choice of water outlet positions
- Balanced and non-balanced versions

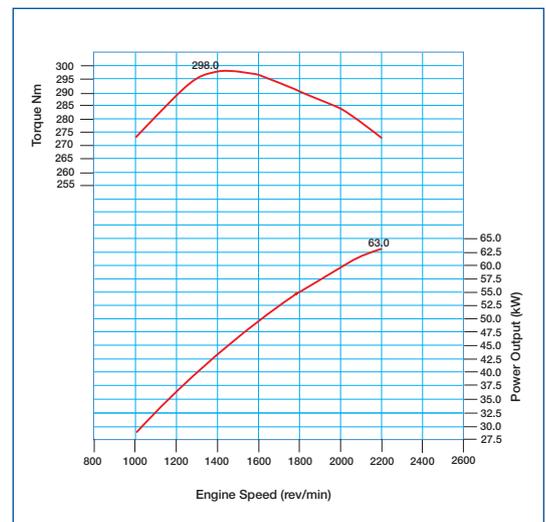
### General Data

|                     |  |
|---------------------|--|
| Number of cylinders | In-line 4 cylinder (vertical in-line)          |
| Bore and stroke     | 105 mm x 127 mm                                |
| Displacement        | 4.4 litres (269 in3)                           |
| Aspiration          | Naturally aspirated                            |
| Cycle               | 4 stroke                                       |
| Combustion system   | Direct injection                               |
| Compression ratio   | 19.3:1   |
| Rotation            | Anticlockwise viewed on flywheel               |
| Cooling system      | Liquid / pressurised                           |
| Dimensions          | Length 768 mm<br>Width 558 mm<br>Height 795 mm |
| Dry weight          | 357 kg   |

Final weight and dimensions will depend on completed specification.

### Option Groups

A full range of additional options are available to enable a customer to specify an engine precisely to an application. These include alternative performance ratings, power take-offs, inlet and exhaust outlets positions and a range of flywheels and flywheel housings to suit different clutches and transmissions.



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