



1100 Series

Diesel Engine - Industrial Open Power Unit

1104C-44TA

92 kW/123 bhp



The new 1100 Series family of IOPU engines boasts unsurpassed productivity levels.

By combining the market leading 1100 Series engine with a matched cooling and air filtration pocket, Perkins is confident that our engines will meet increasing customer demands. The new 1100 Series range provides customers with a compact and self-contained engine package, that optimises performance and maximises value.

Perkins has transformed the threat of new emission laws into the opportunity to develop an engine with improved performance and reliability. Not only does the 1106 comply to USA EPA Tier 2 and EU Stage 2 off-highway emissions legislation, it also exceeds customer expectations on performance. Perkins has consequently created a unique, customer inspired engine family which is undoubtedly a benchmark within the diesel engine market.

Class Leading Performance

The 1104C-44TA boasts an even higher torque capacity than its successful predecessor. The new mechanical engine has 36% more low speed torque with torque back-up increased by 30%.

Cleaner and Quieter

Extensive research into emissions has resulted in an engine which operates with smoke levels barely visible to the naked eye. Perkins innovative Eco-filtration system provides high quality construction with a re-usable canister, a disposable inner element and a simpler service process. With improvements of up to 3dBA in bare engine noise over its predecessor. Developments in numerous individual products such as a new cylinder block design and alterations to the front end gear train have resulted in reduced noise levels throughout the engine's complete operating range.

Quality by Design

Improvements to all aspects of engine production: from concept through to manufacturing, has resulted in a higher level of engine performance, enhanced reliability and greater durability. This combined with extensive investigation into manufacturing processes has simplified subassemblies and improved joint and sealing technology.

Ease of Installation

Design considerations to minimise installation issues provide easy and efficient engine replacement through the carryover of the existing envelope size and mounting points. The addition of a matched radiator and charge cooler to the IOPU engine package allows the engine to run at its optimum performance level.

Lower Operating Costs

Service intervals have doubled and are now set at 500 hours as standard. This confidence in engine reliability has also enabled the warranty period to be extended to 2 years with 3 years on majors. Customers will also benefit from increased fuel economy which has improved by as much as 6% over its predecessor.

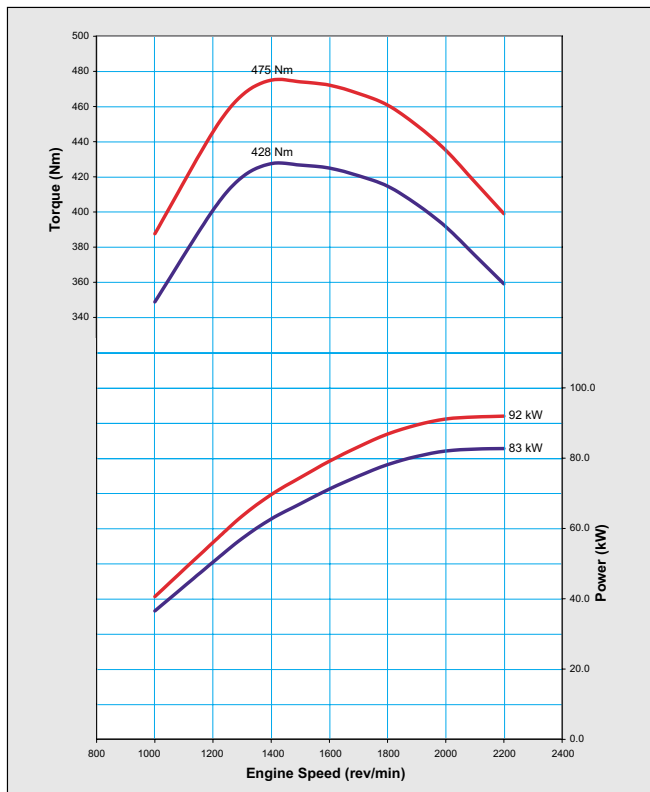
Product Support

Total worldwide service continues to be provided through a network of 4000 distributors and dealers. This is enhanced by the introduction of TIPSS (The Integrated Parts and Service System) which represents a step change in diesel engine support. TIPSS enables customers to specify and order parts electronically as well as service electronic and mechanical engines with on-line guides and service tools.

Engine performance	Net intermittent	Engine speed	Net continuous	Engine speed
Max power kW	92	2200	83	2200
Max power bhp	123	2200	111	2200
Max torque Nm	475	1400	428	1400
Max torque lbf ft	350	1400	315	1400

Power for a run-in engine after 60 hours
Rating standard ISO/TR 14396

1100 Series 1104C-44TA



Lower speed ratings may not be read from this curve. For other ratings consult Perkins Engines Company

Engine Specification

- Cast iron engine block
- Flywheel housing SAE3
- Flywheel
- Ecoplus fuel filter
- Spin-on oil filter
- Glow plug starting aid
- 12 or 24 volt alternator
- 12 or 24 volt starter motor
- LHS PTOs – 37 kW
- Puller and pusher fans
- Radiator incorporating air-to-air charge cooler
- Lub oil sump steel, flat-bottomed with dipstick on lhs
- Balancer or non-balancer
- Integral Inlet manifold
- Gear driven coolant pump
- Oil filler – middle of top cover



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All information in this document is substantially correct at the time of printing but may be altered subsequently by the Company

Option Groups

In order to meet the varying demands of our individual customers, Perkins provide a wide selection of optional items. These enable companies to produce a customised end product, precisely matched to their needs.

General Data

Bore and stroke	105 mm x 127 mm
Number of cylinders	4 In-line
Cubic capacity	4.41 litres (269 cu.in.)
Cycle	4 stroke
Aspiration	Turbocharged, air to air charge cooled
Combustion system	Direct injection
Compression ratio	18.2:1
Engine rotation	Anticlockwise viewed on flywheel
Governing	All speed mechanical
Cooling system	Pressurised coolant
Length	1259 mm
Width	721 mm
Height	966 mm
Dry weight	550 kg

