



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 selfcontained 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 1104 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.



# 1100 Series

### Diesel Engine - Industrial Open Power Unit

64 kW/86 bhp

#### **Class Leading Performance**

- The 1104C-44 boasts an even higher torque capacity than its successful predecessor.
- Impressive low speed torque of over 300 Nm is available to deliver improved machine response

#### **Cleaner and Quieter**

- Extensive combustion research 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.
- Developments in numerous individual components such as a new cylinder block design and alterations to the gear train have resulted in reduced noise levels throughout the engine's complete operating range.
- An improvement of up to 3dBA in bare engine noise over its predecessor.

#### Quality by Design

- Improvements to all aspects of engine production: from concept through to manufacturing, have resulted in a higher level of engine performance, enhanced reliability and greater durability.
- Improved manufacturing processes has simplified sub-assemblies 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 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.
- Warranty period extended to 2 years, with 3 years on major components.
  - Improved fuel economy by as much as 6% over its predecessor.

#### **Product Support**

- Total worldwide service provided through a network of 4000 distributors and dealers.
- TIPSS (The Integrated Parts and Service System) represents a step change in diesel engine support. It enables customers to specify and order parts electronically, as well as service electronic or mechanical engines with the aid of on-line guides and service tools.

Engine Performance	Net Intermittent	Engine Speed	Net Continuous	Engine Speed
Max power kW	64	2400	58	2400
Max power bhp	86	2400	77	2400
Max torque Nm	302	1400	272	1400
Max torque lbf ft	226	1400	203	1400

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

## 1100 Series 1104C-44

#### **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 142 Nm
- Puller or pusher fans
- Radiator
- Lub oil sump steel, flat bottomed with dipstick on LHS
- Balancer or non-balancer
- Integral Inlet manifold
- Gear driven coolant pump
- Oil filter middle of top cover

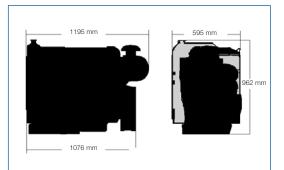
#### General Data

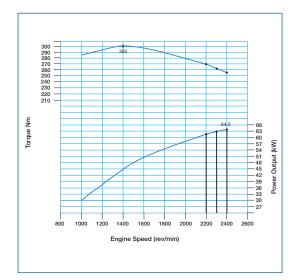
Bore and stroke Number of cylinders Cubic capacity Cycle Aspiration Combustion system Compression ratio Engine rotation

Governing Cooling system Length Width Height Dry weight 105 mm x 127 mm 4 In-line 4.41 litres (269 cu.in) 4 stroke Naturally Aspirated Direct injection 19.25:1 Anticlockwise viewed on flywheel All speed mechanical Pressurised coolant 1195 mm 595 mm 962 mm TBA kg

#### **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.





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

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