83.0 kW / 111.3 hp @ 2200 rpm

The 1104D-44TA IOPU is a new addition to the 1100 Series range of IOPU engines. These ultra clean engines are assembled on a new high technology production line. Frequent computerized checks during the production process ensure high build quality is maintained throughout.

The 1104D IOPU range of engines have a complete fuel system, air cleaner and radiator fitted as standard along with a choice of mechanical or electronic control system making these the ultimate power solution.

The 1100D range with their wide choice of build options, plus all the features and benefits, present a secure future for all our customers at Tier 3/Stage IIIA emissions legislation, and is the platform on which the long-term solution to Tier 4/Stage IIIB legislation will be built.



#### **Emissions**

Meets U.S. EPA Tier 3 and European EU Stage IIIA emissions requirements.

Specification				
Number of cylinders	4 in-line			
Bore and stroke	105 x 127 mm	4.1 x 5.0 in		
Displacement	4.4 litres	269 in <sup>3</sup>		
Aspiration	Turbocharged air to air charge cooled			
Cycle	4 stroke			
Combustion system	Direct injection			
Compression ratio	18:2			
Rotation	Anti-clockwise, viewed on flywheel			
Total lubricating capacity	7.9 litres	2.0 US gal		
Cooling system	Liquid			
Total coolant capacity	17 litres	17 litres 4.5 US gal		

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#### Features and benefits

## Powered by your needs

• The 1104D-44TA IOPU offers a choice of build configurations to match the power needs of customers for a diverse range of applications

## State of the art design

 The 1104D utilises the latest diesel mechanical controlled fuel system technology. This allows the 1104D-44TA to deliver high power density and excellent fuel economy with low exhaust emissions and minimum heat rejection

#### Reduced noise

- Noise minimised at source engine sound levels have been reduced by 2 dBA
- Reduction in noise suppression costs

## Component commonality

- Shared front and rear ends and 'repeated' components pistons, con rods and valve gear
- Rationalised inventory, streamlined training and consistent serviceability

#### Lower installation costs

- Virtually identical hook-up points and envelope size as the 1104C-E44TA
- Customer enjoys a seamless transition during the emissions changeover process

### Lower operating costs

- The 1104D maintains Tier 2/Stage II fuel economy, allowing customers to keep existing fuel tanks
- Service intervals are 500 hours standard
- 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

Low usage warranty package is also available

### Product support

- Perkins actively pursues product support excellence by ensuring our distribution network invest in their territory strengthening relationships and providing more value to you, our customer
- 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
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts and service. We
  give 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
- To find your local distributor: www.perkins.com/distributor



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#### Technical information

#### Air inlet

Mounted air filter and turbocharger

## Cooling system

- Fan (pusher or puller)
- Fan drive
- Radiator
- Water pump

### Electrical equipment

- Alternator (12 or 24 volt)
- Starter motor (12 or 24 volt)

## Flywheel and housing

- Flywheel
- SAE 3 flywheel housing

## Fuel system

Fuel filter

## Lubrication system

- Oil cooler and filter
- Timing case oil filler

### Mountings

Engine mounting brackets

#### PTO

• SAE A or SAE B front PTO (142/280 Nm)

## Starting aids

Glow plugs

### Literature

User's Handbook

## Option groups

The 1104D-44TA IOPU offers a wide choice of standard build specifications to meet specific customer needs:

- 12 or 24 volt alternator
- Pusher or puller fan
- SAE A or SAE B front PTO (142/280 Nm) SAE B provides 63 kW/85 bhp
- Air compression

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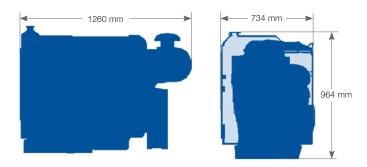
Photographs are for illustrative purposes only and may not reflect final specification.

All information in this document is substantially correct at time of printing and may be altered subsequently.

Final weight and dimensions will depend on completed specification.

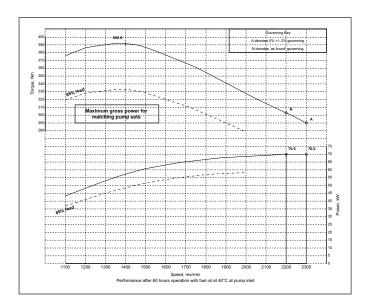


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Engine package weights and dimensions						
Length	1260 mm	49.6 in				
Width	734 mm	28.9 in				
Height	964 mm	38.0 in				
Weight (dry)	567 kg	1250 lb				

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Engine performance	Net intermittent	Speed rpm	Pump sets	Speed rpm
Maximum power (kW)	83.0	2200	63.5	2000
Maximum power (hp)	111.3	2200	85.4	2000
Maximum torque (Nm)	418	1400	353.0	1400
Maximum torque (lbf·ft)	308	1400	261.0	1400

Power for a run-in engine after 60 hours

Net Intermittent = Intermittent service where maximum power and/or are, cyclic (time at full load not to exceed 50%)

Rating standard ISO/TR 14396

