

# 400 Series 403F-11 Industrial

14.1 kW / 19.0 hp @ 2200 rpm

The latest Perkins® 400F range of industrial engines is an evolution of the highly successful and productive Perkins 400D range and has been developed specifically to meet the latest set of emissions in North America.

For our customers, these compact 3 and 4 cylinder engines offer a simple, cost effective upgrade to the latest stringent EPA legislation.

This 1.1 litre, 3 cylinder engine complements the exciting Perkins 400 Series product line-up, offering customers an ultra-compact, lightweight power unit that maintains all the customer benefits they can experience from other products in the range.

With no change to the core engine or hook up points and a high level of component commonality with 400D range, our customers benefit from minimum machine change and development costs to upgrade to Tier 4 Final and a common machine for export markets.

The comprehensive 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, genset and compressor markets, it is another class-leading diesel range from Perkins.



## Emissions statement

**Industrial and IOPU Engines:** Certified against the requirements of US EPA Tier 4 Final (40 CFR Part 1039). Less than 19 kW, EC certification not required.

Specification		
Number of cylinders	3 in-line	
Bore and stroke	77 x 81 mm	3.0 x 3.2 in
Displacement	1.13 litres	69.0 in <sup>3</sup>
Aspiration	Naturally aspirated	
Cycle	4 stroke	
Combustion system	Indirect injection	
Compression ratio	23:1	
Rotation	Clockwise, viewed from front	
Total lubricating capacity	4.4 litres	1.1 US gal
Cooling system	Liquid 50/50 antifreeze	
Total coolant capacity	1.9 litres	0.5 US gal

[www.perkins.com](http://www.perkins.com)

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.

Publication No. PN3037A/12/14 Produced in England ©2014 Perkins Engines Company Limited

 **Perkins®**

THE HEART OF EVERY GREAT MACHINE

# 400 Series 403F-11 Industrial

14.1 kW / 19.0 hp @ 2200 rpm

## Features and benefits

### Ultra-compact power

- Up to 18.4 kW (24.7 hp) from an engine envelope of 0.11 m<sup>3</sup> (3.8 ft<sup>3</sup>)
- Easy installation

### Clean and quiet

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

### Durable and reliable

- Product design and process improvements enhance both engine reliability and durability
- The introduction of a simple electronic governor system gives customers the flexibility of electronic machine integration if needed
- A standard two-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 500 hours, dependent on load factor
- Engine durability and reliability, the warranty offering and ease of installation combine to drive down the cost of ownership
- **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](http://www.perkins.esc)

### Product support

- With highly trained Perkins distributors in thousands of communities in over 180 countries, you are never far away from expert product knowledge, genuine parts and a range of advanced diagnostic technology for keeping your engine in peak condition
- To find your local distributor: [www.perkins.com/distributor](http://www.perkins.com/distributor)

\*Subject to conformance with ASTM D6751 and EN14214

[www.perkins.com](http://www.perkins.com)

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.

Publication No. PN3037A/12/14 Produced in England ©2014 Perkins Engines Company Limited

 **Perkins**<sup>®</sup>

THE HEART OF EVERY GREAT MACHINE

# 400 Series 403F-11 Industrial

14.1 kW / 19.0 hp @ 2200 rpm

## Technical information

- Cast iron engine block
- Flywheel and flywheel housing
- Fuel injection pump
- Split element 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
- Electronic governor
- Alternator 12 volt 40 amp with DC output
- Lub oil pressure switch
- Coolant temperature switch
- SAE A-A PTO
- Choice of cooling fans
- Starter motor 12 volt
- Cold start -20°C (aided)

## Option groups

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

[www.perkins.com](http://www.perkins.com)

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.

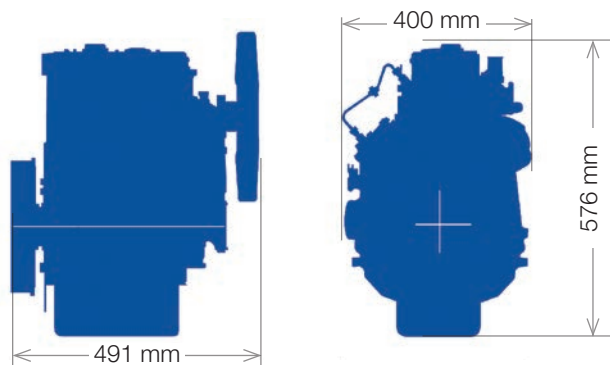
Publication No. PN3037A/12/14 Produced in England ©2014 Perkins Engines Company Limited

 **Perkins**<sup>®</sup>

THE HEART OF EVERY GREAT MACHINE

# 400 Series 403F-11 Industrial

14.1 kW / 19.0 hp @ 2200 rpm



Engine package weights and dimensions

Engine package weights and dimensions		
Length	491 mm	19.3 in
Width	400 mm	15.7 in
Height	576 mm	22.6 in
Weight (dry)	87 kg	191 lb

[www.perkins.com](http://www.perkins.com)

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.

Publication No. PN3037A/12/14 Produced in England ©2014 Perkins Engines Company Limited

 **Perkins**<sup>®</sup>

THE HEART OF EVERY GREAT MACHINE

# 400 Series 403F-11 Industrial

14.1 kW / 19.0 hp @ 2200 rpm

Gross intermittent (ISO/TR 14396)					
Speed rpm	Power kW	Power hp	Speed rpm	Torque Nm	Torque lbf·ft
2200	14.1	19.0	2200	61.0	45.0

Power output for a run-in engine after 60 hours