45-55.4 kW (60-74 hp) @ 2200 rpm EU Stage IV/U.S. EPA Tier 4 Final

The Perkins® 850 Series brings you class-leading power density while meeting the toughest emission standards. Building on more than 80 years of Perkins innovation and customer insights, the 850 Series delivers 45-90 kW (60-120 hp), making it ideal for telehandlers, backhoe loaders, skid steer loaders, access platforms and many other applications. If you're looking to create smaller, higher performing, cost effective machines, the 850 Series has the features and benefits for you.

The 854F-E34T IOPU has a high power density, combined with excellent torque. We work with OEMs to optimise the fuel consumption, matching the operating cycles of a wide range of equipment and applications. No additional fluids or additives are required, which lowers your operating costs.

Designed to meet EU Stage IV/U.S. EPA Tier 4 Final emission standards.



Specifications

Power Rating			
Minimum power	74.3 hp		
Maximum power	55.4 kW	74.3 hp	
Rated speed	2200 rpm		
Maximum torque	318 Nm @ 1600 rpm	234.5 lb-ft @ 1600 rpm	

Emission Standards	
Emissions	EU Stage IV/U.S. EPA Tier 4 Final

General			
Number of cylinders	4 inline		
Bore	99 mm	3.9 in	
Stroke	110 mm	4.3 in	
Displacement	3.4 litres	207.5 cubic in	
Aspiration	Turbocharged		
Cycle	4 stroke		
Compression ratio	17:1		
Combustion system	Direct injection		
Rotation (from flywheel end)	Anti-clockwise		
Cooling system	Liquid		

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Total coolant capacity	16 litres	4.2 US gal
Total lubricating capacity	9.5 litres	2.51 US gal

Engine Dimensions*				
Length	1252 mm	49.3 in		
Width	705 mm	27.7 in		
Height	1033 mm	40.7 in		
Dry weight	407 kg	897 lb		

Aftertreatment Dimensions* - DOC/DPF Through flow				
Length	509 mm	20 in		
Diameter	149 mm	5.8 in		
Weight	14 kg	30.8 lb		

Disclaimer		
*Final dimensions dependent on selected options	0	0

Features and Benefits

A lifetime of low cost

The 850 Series offers good fuel economy and performance. These engines have been designed to be reliable and fuel efficient, and built for durability.

Low cost maintenance is achieved through hydraulic tappets, multi-vee belts, the through-flow diesel particulate filter (DPF) option (which offers a service free aftertreatment) and 500 hour oil change intervals.

Flexible

A single, core engine platform, with additional compact aftertreatment options, the 850 Series allows you to create smaller, high performing, more cost-effective machines for a wide range of applications.

We provide two year warranties for variable speed models as standard.

The 850 Series benefits from more than 80 years of Perkins innovation and customer insights.

Powerful





45-55.4 kW (60-74 hp) @ 2200 rpm EU Stage IV/U.S. EPA Tier 4 Final

The 850 Series gives you increased power over products of a similar size. The 854F-E34T provides 45-55.4 kW (60-74 hp) and 291 Nm of torque. If you require more power, the 854F-E34TA provides 63-90 kW (84-120 hp) and 490 Nm of torque.

The compact design of the engine means it is suitable for a range of applications including agricultural tractors, telehandlers, access platforms, air compressors, forklift trucks, trenchers, skid steer loaders, excavators and backhoe loaders.

Technical Information

Aftertreatment technology

- DOC Diesel Oxidation Catalyst
- DPF Diesel Particulate Filter

Air inlet system

· Standard air cleaners

Control system

- All connectors and wiring looms waterproof and designed to withstand harsh off-highway environments
- Flexible and configurable software features and J1939 standard communications I/O
- Full electronic control system
- Fully integrated, engine-mounted engine control module

Flywheels and flywheel housing

SAE3 configuration

Fuel system

- · Electronic high pressure common rail
- · Engine-mounted fuel filters

General

- · Balanced or unbalanced
- Engine control panel
- · Machine side wiring
- Pusher or puller fan

Power take-off

SAE A flange on left-hand side

Standard emissions control equipment

• NRS - NOx Reduction System



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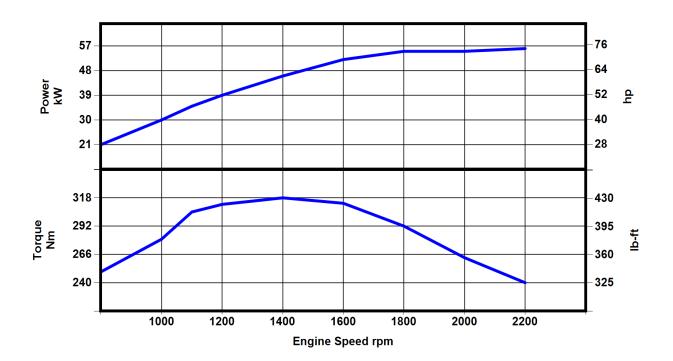
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850 Series 854F-E34T INDUSTRIAL ENGINE

EU Stage IIIB/U.S. EPA Tier 4 Final

55.0-55.5 kW / 73.8-74.4 hp



Power kW	Power hp	Rated Speed (rpm)	Torque Nm	Torque lb-ft	Speed (rpm)	Rating Type
55.0	73.8	2500	291	394	1600	Industrial C intermittent rating
55.5	74.4	2200	318	431	1400	Industrial C intermittent rating

Rating Standard ISO 14396:2002

Additional ratings are available for specific customer requirements. Consult your Perkins distributor.

Unless otherwise specified, all stated data is for maximum rated speed and 100% load.

B rating performance data will be added upon availability

Rating Definitions and Conditions

IND-C (Intermittent) Rating

Is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

Rating Conditions for Diesel Engines – up to 7.1 liters are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in. Hg), with a vapor pressure of 1 kPa (0.295 in Hg) and 25°C (77°F). Performance is measured using fuel to specification EPA 2D 89.330-96 with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

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