850 Series 854F-E34TG1 Diesel Engine – ElectropaK 55.4 kWm @ 1800 rpm

The Perkins[®] 850 Series ElectropaK product brings you outstanding power density while meeting the toughest emission standards. Building on more than 85 years of Perkins innovation and customer insights, the 854F-E34TG1 is designed to deliver U.S. EPA Tier 4 Final emissions legislation in North America while offering competitive performance.

No additional fluids or additives are required, which lowers your operating costs.



88 Perkins[®]

THE HEART OF EVERY GREAT MACHINE

Emissions

Designed to meet U.S. EPA Tier 4 Final

Specification				
Number of cylinders	4 vertical in-line			
Bore and stroke	99 x 110 mm	3.9 x 4.3 in		
Displacement	3.4 litres	207.5 in ³		
Aspiration	Turbocharged			
Cycle	4 stroke			
Combustion system	Direct injection			
Compression ratio	17:1			
Rotation	Anti-clockwise, viewed on flywheel			
Total lubricating capacity	9.5 litres	2.5 US gal		
Cooling system	Liquid			
Total coolant capacity	12.05 litres	3.18 US gal		

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. PN3170/01/18 Produced in England ©2018 Perkins Engines Company Limited

55.4 kWm @ 1800 rpm

Features and benefits

Dependable power

- World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation, and many hours of productive life
- Turbocharging with smart wastegate available on all ratings

Lifetime of low cost

- Fuel consumption optimized prime power and continuous running applications
- Low ownership costs are enabled by a 3,000 hour service interval for the multi vee belts, service-free tappets and no requirement for aftertreatment ash servicing

Local support, global coverage

- Perkins recognise that the customer relationship is important to machine manufacturers and we can offer a range of flexible solutions to help provide appropriate support, either to the OEM's network or directly to the machine customer
- Perkins information systems enable our distributors to quickly diagnose engine faults and identify the right parts. The Perkins logistics operation is able to dispatch more than 45,000 different parts from stock, reaching the customer within 24 hours
- To find your local distributor: www.perkins.com/distributor

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. PN3170/01/18 Produced in England ©2018 Perkins Engines Company Limited

THE HEART OF EVERY GREAT MACHINE

850 Series 854F-E34TG1 Diesel Engine - Electropak

55.4 kWm @ 1800 rpm

Technical information

Air inlet

• Standard air cleaners

Control system

- Full electronic 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

Cooling system

- Engine mounted radiator with top tank temperature of 108°C
- 50:50 water glycol mix
- Detailed guidance on cooling system design and validation available to ensure machine reliability

Standard emissions control equipment

• NRS – NOx Reduction System

Flywheels and flywheel housing

• Wide choice of drivetrain interfaces, supplied with SAE3 configuration as standard

Fuel system

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

General

• Pusher fan as standard

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.



THE HEART OF EVERY GREAT MACHINE

850 Series 854F-E34TG1 Diesel Engine - ElectropaK

55.4 kWm @ 1800 rpm



Engine package weights and dimensions				
Length	1163 mm	45.8 in		
Width	678 mm	26.7 in		
Height	958 mm	37.7 in		
Weight (dry)	404.5 kg	891.8 lb		

Aftertreatment module factory fitted to engine as standard.

Aftertreatment

- DOC Diesel Oxidation Catalyst
- DPF Diesel Particulate Filter
- No ash service requirement, low temperature regeneration

Power

Using our advanced research and development techniques, we have perfectly matched the aftertreatment system to the engine. The engine performance has then been optimised to give the application maximum productivity whilst the aftertreatment remains invisible to the equipment operator when in use.

Mounting

Engine mounted installation simplifies customers integration and manufacturing requirements.

Service

www.perkins.com

Service free for the life of the engine.



Publication No. PN3170/01/18 Produced in England ©2018 Perkins Engines Company Limited

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

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

Final weight and dimensions will depend on completed specification.

THE HEART OF EVERY GREAT MACHINE

850 Series 854F-E34TG1 Diesel Engine - Electropak

55.4 kWm @ 1800 rpm

	Type of operation	Generator output		Engine power			
speed rpm				Gross		Net	
		kVA	kWe	kWm	hp	kWm	hp
1800	Prime power	55	43	50.3	68	48	64
	Standby power	59	47	55	74	53	71

Percent of prime power	Fuel consumption at 1800 rpm g/kWh	Fuel consumption at 1800 rpm I/hr
100%	237	13.1
75%	240	9.9
50%	245	6.7
25%	299	4.1

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.



THE HEART OF EVERY GREAT MACHINE

Publication No. PN3170/01/18 Produced in England ©2018 Perkins Engines Company Limited