



## 400 Series

### 403A-15G1

Diesel Engine - Electropak

13.2 kWm @ 1500 rev/min



#### Powered by your needs

- The 403A-15G1 Electropak is a powerful but quiet 1.5 litre naturally aspirated 3-cylinder compact package

#### Compact, Clean, Efficient Power

- Design features on the 400 Series Electropaks ensure clean rapid starting in all conditions whilst delivering impressive performance, with low operating costs, in a small, efficient package size.

#### Lower 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.

#### World-class Product Support

- 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 finger tips, covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine.
- Perkins actively pursues product support excellence by insisting our distribution network invest in their territory to provide you with a consistent quality of support across the globe.
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts giving 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.

The 400 Series engine family continues to set new standards in the compact engine market. Developed alongside customers to fulfill their needs in the Genset, Compressor, Agricultural and general Industrial markets.

These new Electropaks provide compact power, from a robust family of 3 and 4 cylinder diesel engines designed to provide economic and durable operation at Prime and Standby duties, hitting the key power nodes required by the power generation industry.

Engine Speed	Type of Operation	Typical generator Output (Net)		Engine Power				Low Idle
				Gross		Net		
		kVa	kWe	kWm	bhp	kWm	bhp	
1500	Prime Power	13.0	10.4	12.2	16.4	12.0	16.0	N/A
	Standby Power	14.3	11.4	13.5	18.1	13.2	17.6	N/A

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1. Derating may be required for conditions outside these; consult Perkins Engines Company Limited. Generator powers are typical and are based on typical alternator efficiencies and a power factor (cos  $\theta$ ) of 0.8.

Fuel specification: BS 2869: Part 2 1998 Class A2 or ASTM D975 D2.

Rating Definitions: Prime Power: Power available at variable load in lieu of a main power network. Overload of 10% is permitted for 1 hour in every 12 hours operation. Standby (maximum): Power available at variable load in the event of a main power network failure. No overload is permitted. Photographs are for illustrative purposes only and may not reflect final specification.

# 400 Series

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### Standard ElectropaK Specification

#### Air Inlet

- Mounted air filter

#### Fuel System

- Mechanically governed cassette type fuel injection pump
- Split element fuel filter

#### Lubrication System

- Wet steel sump with filler and dipstick
- Spin-on full-flow lub oil filter

#### Cooling System

- Thermostatically-controlled system with belt driven coolant pump and pusher fan
- Mounted radiator, piping and guards

#### Electrical Equipment

- 12 volt starter motor and 12 volt 15 amp alternator with DC output
- Oil pressure and coolant temperature switches
- 12 volt shut off solenoid energised to run
- Glow plug cold start aid and heater/starter switch

#### Flywheel and Housing

- 1500 rev/min
- High inertia flywheel to SAE J620 Size 190.5 mm (7½ in) Heavy
- Flywheel housing SAE 4 Long

#### Mountings

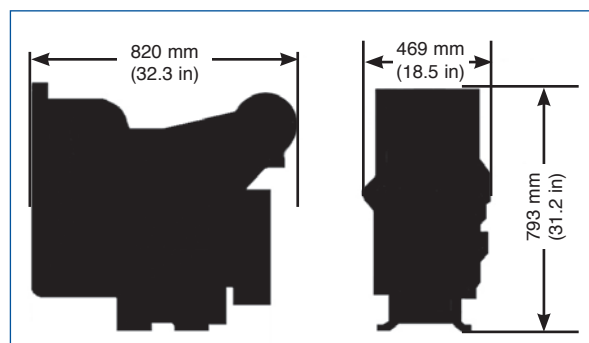
- Front mounting bracket

#### Optional Equipment

- Operation and Maintenance Manual
- Parts Book

#### Option Groups

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



Fuel Consumption		
Engine Speed	1500 rev/min	
	g/kWh	l/hr
Standby	251	4.1
Prime Power	248	3.7
75% of prime power	252	2.8
50% of prime power	277	2.0

#### General Data

Number of cylinders	3
Cylinder arrangement	Vertical in-line
Cycle	4 stroke
Aspiration	Naturally aspirated
Combustion system	Indirect injection
Compression ratio	22.5:1
Bore and Stroke	84 x 90 mm (3.3 x 3.5 in)
Displacement	1.496 litres (91.3 in <sup>3</sup> )
Direction of rotation	Anti-clockwise viewed on flywheel
Cooling system	Water cooled
Total coolant capacity	6.0 litres (1.58 gals)
Total lubrication system capacity	6.0 litres (1.58 gals)
Length	820 mm (32.3 in)
Width	469 mm (18.5 in)
Height	793 mm (31.2 in)
Total weight (dry)	197 kg (434.3 lb)

Final weight and dimensions will depend on completed specification.



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