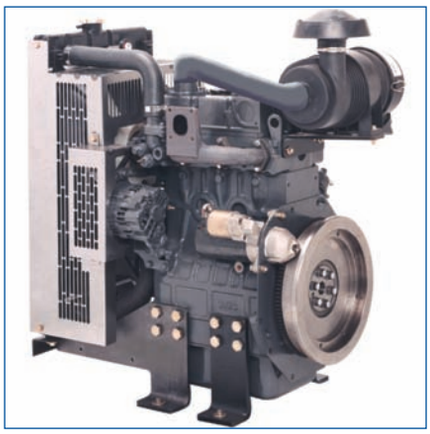


The 400 Series engine family continues to set new standards in the compact engine market. Developed alongside customers to fulfill their needs in the Genset, Compressor, Agricultural and general Industrial markets.

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.

400 Series

403D-11G

Diesel Engine - ElectropaK

9.3 kWm @ 1500 rev/min
11.4 kWm @ 1800 rev/min
17.9 kWm @ 3000 rev/min

Powered by your needs

- The 403D-11G ElectropaK is a powerful but quiet 1.1 litre naturally aspirated 3-cylinder compact package

Compact, Clean, Efficient Power

- Design features on the 400D range of ElectropaKs ensures clean rapid starting in all conditions whilst delivering impressive performance with low operating costs in a small, efficient package size

Lower Operating Costs

- The compact package size makes installation and transportation easier and more cost effective
- Operating and maintenance costs are reduced through excellent fuel and oil economy
- Service intervals are set at 500 hours as standard and Perkins provides comprehensive warranty cover for two years, with three years on major engine components. A low usage warranty package is also available

Long-term Power Solution

- The 400D range of ElectropaKs has been designed to fully comply with stringent EU and EPA emissions regulations, providing an emissions compliant power solution for the future

World-class Product Support

- At Perkins we are constantly researching, developing and investing in our products and services. Total worldwide support is provided through a network of distributors and service outlets, providing access to over 50,000 parts and exchange units 24 hours a day, 365 days a year. This support is enhanced by TIPSS (The Integrated Parts and Service System). TIPSS enables customers to electronically specify and order parts as well as service 400 Series engines with online guides and service tools

Emissions statement

- Certified against the requirements of EU2007 (EU 97/68/EC Stage II) and EPA Tier 4 Final (EPA 40 CFR Part 1039 Tier 4) legislation for non-road mobile machinery, powered by constant speed engines

Engine Speed	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1500	Prime Power	9.0	7.2	8.6	11.5	8.4	11.4
	Standby Power	10.0	8.0	9.5	12.7	9.3	12.6
1800	Prime Power	11.2	9.0	10.7	14.3	10.3	13.8
	Standby Power	12.4	9.9	11.8	15.8	11.4	15.3
3000	Prime Power	17.5	14.0	17.9	24.0	16.1	22.8
	Standby Power	19.5	15.6	19.7	26.4	17.9	25.2

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

Publication No. 1910/05/08 Produced in England

400 Series

403D-11G

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

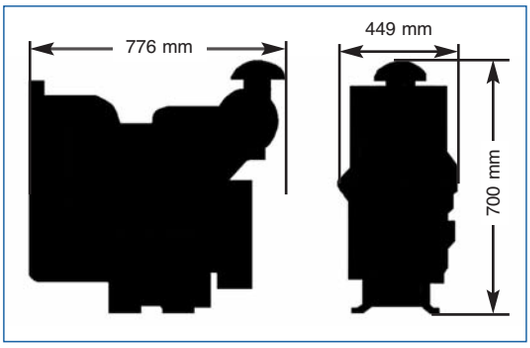
Cooling System
- Thermostatically-controlled system with belt driven coolant pump and pusher fan
- Mounted radiator, piping and guards

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
- 1500/1800 rev/min
  High inertia flywheel to SAE J620 Size 6½ Heavy
  Flywheel housing SAE 5 Long
- 3000 rev/min
  High inertia flywheel to SAE J620 Size 6½ Light
  Flywheel housing SAE 5 Short

Mountings
- Front and rear engine mounting brackets

Optional Equipment
- Workshop manual
- Parts book



Fuel Consumption		
Engine Speed	g/kwh	l/hr
Standby	268	3.6
Prime power	248	3.0
75% of prime power	257	2.3
50% of prime power	280	1.7

General Data

Number of cylinders	3
Cylinder arrangement	Vertical in-line
Cycle	4 stroke
Aspiration	Naturally aspirated
Combustion system	Indirect injection
Compression ratio	23:01
Bore and Stroke	77 x 81 mm
Displacement	1.131 litres
Direction of rotation	Anti-clockwise viewed on flywheel
Cooling system	Water cooled
Total coolant capacity	5.2 litres
Total lubrication system capacity	4.9 litres
Length	776 mm
Width	449 mm
Height	700 mm
Total weight (dry)	129.2 kg

Final weight and dimensions will depend on completed specification.

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