

400 Series 403D-07G Electro Unit

6.0 kWm @ 1500 rpm
 7.4 kWm @ 1800 rpm
 13.2 kWm @ 3000 rpm

The Perkins® 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 Electro Units provide compact power, from a robust family of 2, 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.

Powered by your needs

- The Perkins 400D range has been developed in consultation with our marketplace. This 0.7 litre, 3 cylinder engine is one of the smallest engines offered by Perkins. However, this ultra-compact, lightweight power unit still maintains all the customer benefits experienced from this exciting product range

Compact, clean, efficient power

- Design features on the 400D range of ElectropaKs and Electro Units 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



Long-term power solution

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

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

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.com

www.tier4air.com

www.perkins.com/distributor

To find your local distributor

Engine speed	Type of Operation	Typical Generator Output (Net)		Engine Power				Low Idle
		kVA	kWe	Gross		Net		
				kWm	hp	kWm	hp	
1500	Prime power	5.8	4.7	6.0	8.1	5.4	7.2	n/a
	Standby power	6.4	5.1	6.6	8.8	5.9	7.9	n/a
1800	Prime power	7.1	5.7	6.7	9.0	6.6	8.9	n/a
	Standby power	7.8	6.3	7.4	9.9	7.3	9.8	n/a
†3000	Prime power	12.3	9.8	11.9	16.0	11.5	15.4	1600 ± 25
	Standby power	13.5	10.8	13.2	17.7	12.6	16.9	1600 ± 25

Subject to conformance with ASTM D6751 and EN14214.

†Regarding gen sets ≥ 3000 rev/min: 'The U.S. EPA has certified this engine as a constant speed engine, with engine speed controlled by a solenoid that allows operation only at idle or full power position. The solenoid is a required element of design. It is the responsibility of the equipment manufacturer to install the proper solenoid. Installation of this engine in equipment without the required solenoid (or in any manner that allows variable speed operation) is not covered by EPA certification, voids the emissions warranty, and may subject the equipment manufacturer to penalties under U.S. law'.

Power output for a run-in engine after 60 hours.

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 φ) 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.

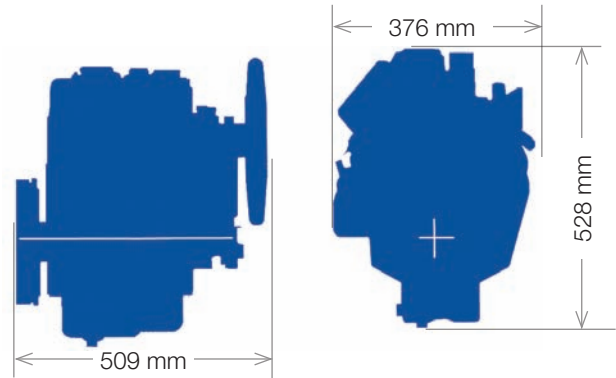
Photographs are for illustrative purposes only and may not reflect final specification.

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

Publication No.PN1939/01/13 Produced in England ©2012 Perkins Engines Company Limited

400 Series 403D-07G Electro Unit

6.0 kWm @ 1500 rpm
 7.4 kWm @ 1800 rpm
 13.2 kWm @ 3000 rpm



Standard Electro Unit specification

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

Electrical equipment

- 12 volt starter motor and 12 volt 14 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

Cooling pack

- Radiator and hoses supplied loose

Optional equipment

- Parts book

Option groups

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

Engine data

Number of cylinders	3
Cylinder arrangement	Vertical in-line
Cycle.....	4 stroke
Aspiration	Naturally aspirated
Combustion system.....	Indirect injection
Compression ratio	23.5:1
Bore and Stroke	67 x 72 mm (2.6 x 2.8 in)
Displacement	0.761 litres (46.4 cubic in)
Direction of rotation	Anti-clockwise viewed on flywheel
Cooling system.....	Water cooled
Total coolant capacity.....	2.6 litres (0.6 US gals)
Total lubrication system capacity	3.05 litres (0.8 US gals)
Governing level.....	1500 rpm G1 / 1800 G2
Dimensions	
Length	509 mm (20 in)
Width.....	376 mm (14.8 in)
Height.....	528 mm (20.7 in)
Total weight (dry).....	71 kg (156.5lb)

Final weight and dimensions will depend on completed specification.

Engine speed	Fuel Consumption					
	1500 rpm		1800 rpm		3000 rpm	
	g/kWh	l/hr	g/kWh	l/hr	g/kWh	l/hr
100% prime power	253	2.2	258	2.3	271	3.8

Emissions statement

Industrial and IOPU Engines: Certified against the requirements of EU Stage IIIB (Directives 97/68/EC as last amended, and 2004/26/EC, as last amended); and US EPA Tier 4 Final (40 CFR Part 1039).

Constant Speed engines for use in Industrial, IOPU and ElectropaK applications: Certified against the requirements of EU Stage IIIA (Directive 97/68/EC, as last amended for mobile applications); and US EPA Tier 4 Final (40 CFR Part 60 for stationary applications and 40 CFR Part 1039 for mobile applications).

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.PN1939/01/13 Produced in England ©2012
 Perkins Engines Company Limited

Perkins Engines Company Limited

Peterborough PE1 5FQ
 United Kingdom
 Telephone +44 (0)1733 583000
 Fax +44 (0)1733 582240
www.perkins.com



THE HEART OF EVERY GREAT MACHINE