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 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.perkins.com/esc

www.perkins.com/distributor
To find your local distributor

Engine speed	Type of Operation	Typical Generator Output (Net)		Engine Power				
				Gross		Net		Low Idle
		kVA	kWe	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.

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 ($\cos \theta$) 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.



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
- 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 61/2 Heavy Flywheel housing SAE 5 Long
- 3000 rev/min High inertia flywheel to SAE J620 Size 61/2 Light Flywheel housing SAE 5 Short

Mountings

Front and rear engine mounting brackets

Cooling pack

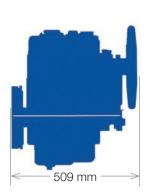
Radiator and hoses supplied loose

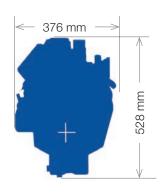
Optional equipment

Parts book

Option groups

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





Engine data

Number of cylinders	3
Cylinder arrangement	
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 rotationAnti-	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.

Fuel Consumption											
Engine	1500	rpm	1800	rpm	3000 rpm						
speed	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 IIIA (Directives 97/68/EC as last amended, and 2004/26/EC, as last amended).

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.

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

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