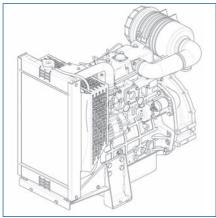




# 400 Series 404A-22G1

Diesel Engine - ElectropaK 20.3 kWm @ 1500 rev/min



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.

### Powered by your needs

The 404A-22G1 ElectropaK is a powerful but quiet 2.2 litre naturally aspirated 4-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.

Engine Speed	Type of Operation	Typical generator Output (Net)		Engine Power				
				Gross		Net		Low Idle
		kVa	kWe	kWm	bhp	kWm	bhp	
1500	Prime Power	20.3	16.2	18.7	25.1	18.4	24.7	N/A
	Standby Power	22.3	17.8	20.6	27.6	20.3	27.2	N/A

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

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.

# 400 Series 404A-22G1

# 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

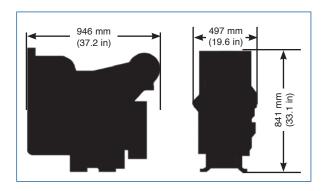
Front mounting bracket

#### 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							
Frains Chood	1500 rev/min						
Engine Speed	g/kWh	l/hr					
Standby	244	6.1					
Prime Power	237	5.3					
75% of prime power	238	4.0					
50% of prime power	258	2.9					

#### General Data

Number of cylinders Cylinder arrangement Vertical in-line Cycle 4 stroke

Aspiration Naturally aspirated Combustion system Indirect injection

Compression ratio 23.3:1

84 x 100 mm (3.3 x 3.9 in) Bore and Stroke Displacement 2.216 litres (135.2 in<sup>3</sup>) Direction of rotation Anti-clockwise viewed on

flywheel

Cooling system Water cooled Total coolant capacity 7.0 litres (1.85 gals) Total lubrication system 10.6 litres (2.8 gals)

capacity

Length 946 mm (37.2 in) Width 497 mm (19.6 in) 841 mm (33.1 in) Height Total weight (dry) 242 kg (533.5 lb)

Final weight and dimensions will depend on completed specification.



**Perkins Engines Company Limited** 

Peterborough PE1 5NA United Kingdom Telephone +44 (0)1733 583000 Fax +44 (0)1733 582240

www.perkins.com

Distributed by

All information in this document is substantially correct at time of printing and may be altered subsequently Publication No. 2002/01/12 Produced in England @2012 Perkins Engines Company Limited