Awaiting image



# 400 Series 404D-22TG

Diesel Engine - ElectropaK

26.7 kWm @ 1500 rev/min 31.7 kWm @ 1800 rev/min

### Powered by your needs

- The 404D-22TG is a new addition to the 400D range of ElectropaKs and is a powerful but quiet 2.2 litre turbocharged 4-cylinder compact package
- Electronically governed and switchable 1500/1800 rpm

# Compact, Clean, Efficient Power

 Design features on the 404D-22TG ElectropaK ensures clean rapid starting in all condition 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 has been designed to fully comply with stringent EU and EPA emissions regulations, providing an emissions compliant power solution for the future (see 'Perkins Emissions Statement' on page 2).

# 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.

	Type of Operation	Typical Generator Output (Net)		Engine Power			
Engine Speed				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1500	Prime Power	27.3	21.8	25.2	33.7	24.3	32.6
	Standby Power	30.0	24.0	27.7	37.1	26.7	35.8
1800	Prime Power	32.1	25.6	30.3	40.5	28.8	38.6
	Standby Power	35.3	28.2	33.3	44.7	31.7	42.5

#### \*Subject to conformance with ASTM D6751 and EN14214.

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1.

Generator powers are typical and are based on typical alternator efficiencies and a power factor (cos  $\theta$ ) of 0.8.

#### 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.

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.

Derating may be required for conditions outside these; consult Perkins Engines Company Limited.

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

# 400 Series 404D-22TG

# Standard ElectropaK Specification

#### Air Inlet

Mounted air filter

#### Fuel System

- Electronically 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 65 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 7½ Heavy
- Flywheel housing SAE 4 Long

#### Mountings

Front and rear engine mounting bracket

#### **Option Groups**

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

#### **Optional Equipment**

- Workshop manual
- Parts book

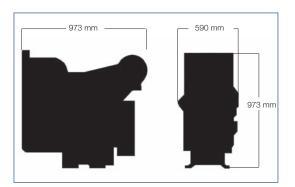
#### **Emissions Statement**

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

# **Perkins**

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Fuel Consumption									
Engine Speed	1500 r	ev/min	1800 rev/min						
Engine Speed	g/kWh	l/hr	g/kWh	l/hr					
Standby Prime power	261 246	8.3 7.1	247 241	9.3 8.3					
75% of prime	240	5.0	241	6.2					
50% of prime power	238	3.5	249	4.3					

#### General Data

Number of cylinders Cylinder arrangement Cycle Aspiration Combustion system Compression ratio Bore and Stroke Displacement Direction of rotation

Total weight (dry)

Cooling system Total coolant capacity Total Lubrication system capacity Length Width Height

#### 4 Vertical in-line 4 stroke Turbocharged Indirect injection 23.3:1 84 x 100 mm 2.216 litres Anti-clockwise viewed on flywheel Water cooled 9.3 litres 10.6 litres

973 mm 590 mm 973 mm 242 kg

Final weight and dimensions will depend on completed specification.

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