### 1100 Series 1104A-44TG1 Diesel Engine - Electropak

64.3 kWm / 86.2 hp @ 1500 rpm

Building upon Perkins proven reputation within the power generation industry, the 1100 Series range of ElectropaK engines now fit even closer to customers needs.

In the world of power generation success is only gained by providing more for less. With the 1104A-44TG1 Perkins has engineered even higher levels of reliability, yet lowered the cost of ownership.

1100A units are designed for territories that do not require compliance to EPA or EU emissions legislation. These units are able to meet TA luft legislation.



| Specification              |                                      |                       |  |
|----------------------------|--------------------------------------|-----------------------|--|
| Number of cylinders        | 4 vertical in-line                   |                       |  |
| Bore and stroke            | 105 x 127 mm                         | 4.1 x 5.0 in          |  |
| Displacement               | 4.4 litres                           | 268.5 in <sup>3</sup> |  |
| Aspiration                 | Turbocharged                         |                       |  |
| Cycle                      | 4 stroke                             |                       |  |
| Combustion system          | Direct injection                     |                       |  |
| Compression ratio          | 17.25:1                              |                       |  |
| Rotation                   | Anti-clockwise, viewed from flywheel |                       |  |
| Total lubricating capacity | 8.0 litres                           | 2.1 US gal            |  |
| Cooling system             | Water-cooled                         |                       |  |
| Total coolant capacity     | 13.0 litres 3.4 US gal               |                       |  |

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**Perkins**®

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### Features and benefits

#### Compact, efficient power

- 1100 Series is the result of an intensive period of customer research that has guided the development of the range
- The new 4.4 litre cylinder block ensures bore roundness is maintained under the pressures of operation. It also ensures combustion and mechanical noise is lowered
- A new cylinder head has re-established Perkins mastery of air control

#### Quality by design

• Product design and Class A manufacturing improvements enhance product reliability while maintaining Perkins legendary reputation for durability

#### Cost effective power

- Compact size and low noise
- Lower fuel consumption and oil use
- 500 hour service intervals
- 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.esc

#### Product support

- Perkins actively pursues product support excellence by ensuring our distribution network invest in their territory strengthening relationships and providing more value to you, our customer
- 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 fingertips covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts and service. We give 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
- To find your local distributor: www.perkins.com/distributor

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### Technical information

#### Air inlet

• Mounted air filter

#### Fuel system

- Rotary type pump
- Ecoplus fuel filter

#### Lubrication system

- Wet sump with filler and dipstick
- Spin-on oil filter

#### Cooling system

- Thermostatically-controlled system with gear-driven circulation pump and belt-driven pusher fan
- Mounted radiator and piping

#### Electrical equipment

- 12 volt starter motor and 12 volt 65 amp alternator with DC output
- 12 volt shutdown solenoid energised to run
- Glow plug cold start aid

#### Flywheel housing

- High inertia flywheel to SAE J620 size 10/111/2
- SAE 3 flywheel housing

#### Literature

User's Handbook

#### Optional equipment

- Woodward electronic governor (LCG2)
- Workshop manual
- Parts book

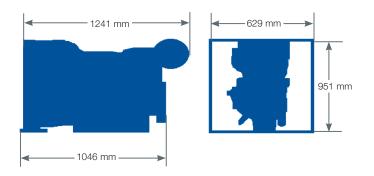
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| Engine package weights and dimensions |         |         |  |  |  |
|---------------------------------------|---------|---------|--|--|--|
| Length                                | 1241 mm | 48.8 in |  |  |  |
| Width                                 | 629 mm  | 24.7 in |  |  |  |
| Height                                | 951 mm  | 37.4 in |  |  |  |
| Weight (dry)                          | 463 kg  | 1021 lb |  |  |  |

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## 1100 Series 1104A-44TG1 Diesel Engine - Electropak

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|              | Type of<br>operation | Typical generator<br>output (Net) |      | Engine power |      |      |      |
|--------------|----------------------|-----------------------------------|------|--------------|------|------|------|
| Speed<br>rpm |                      |                                   |      | Gross        |      | Net  |      |
|              |                      | kVA                               | kWe  | kWm          | hp   | kWm  | hp   |
| 1500         | Prime power          | 65.0                              | 52.0 | 59.6         | 79.9 | 58.4 | 78.3 |
|              | Standby power        | 71.5                              | 57.2 | 65.6         | 88.0 | 64.3 | 86.2 |

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS5514/1. Derating may be required for conditions outside these; consult Perkins Engines Company Limited.

Generator powers are typical and are based on an average alternator efficiency and a power factor (cos. θ) of 0.8. Fuel specification: BS 2869: Part 2 1998 Class A2 or DIN EN 590. Lubricating oil: 15W40 to API CG4.

#### Rating definitions

**Prime power:** Variable load. Unlimited hours usage with an average load factor of 80% of the published prime power over each 24 hour period. A 10% overload is available for 1 hour in every 12 hours of operation. **Standby power:** Variable load. Limited to 500 hours annual usage, up to 300 hours of which may be continuous running. No overload is permitted.

| Percent of prime power | Fuel consumption at 1500 rpm<br>g/kWh | Fuel consumption at 1500 rpm<br>I/hr |
|------------------------|---------------------------------------|--------------------------------------|
| Standby power          | 207                                   | 16.2                                 |
| Prime power            | 208                                   | 14.8                                 |
| 75%                    | 209                                   | 11.2                                 |
| 50%                    | 224                                   | 8.0                                  |

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