

3.152 Range

3.1524

Diesel Engine –
ElectropaK

27.0 kWm 1500 rev/min
30.5 kWm 1800 rev/min

The Perkins 3.152 family of ElectropaK engines are undoubtedly the benchmark heavy duty three cylinder engines. Their reputation for performance and reliability is renowned throughout the power generation industry.

The 3.1524 is a naturally aspirated, 3 cylinder, 2.5 litre engine. It is an upgrade of the highly successful D3.152 ElectropaK giving increased performance but the same premium design features of the D3.152 to provide economic and durable operation, again offering the ideal characteristics for electrical power generation.



Economic power

- **One side servicing** for reduced service time and cost.
- **Direct injection combustion technology** and rotary fuel injection pump give high performance with excellent fuel economy.

- **Rated speed is changeable** between 1500rpm and 1800rpm allowing standard builds to operate at either 50Hz or 60Hz.

Reliable, durable power

- **Proven in operation** for over 10 years.

- **Wherever a Perkins' ElectropaK engine** is put into service, it will never be far from the support provided by a global network of 4000 distributors and dealers, all backed by a parts distribution centre giving 24 hour service, 365 days a year.
- **Suitable for operation** in ambient temperatures up to 46°C.
- **Fuelled starting aid** for temperatures down to -20°C.

| Engine Speed rev/min | Type of Operation | Typical Generator Output (Net) | | Engine Power | | | |
|-------------------------|-------------------|--------------------------------|------|--------------|------|------|------|
| | | kVA | kWe | Gross | | Net | |
| | | | | kWm | bhp | kWm | bhp |
| 1500 | Prime power | 27.5 | 22.0 | 25.0 | 33.5 | 24.5 | 33.0 |
| | Standby power | 30.0 | 24.0 | 27.5 | 37.0 | 27.0 | 36.0 |
| 1800 | Prime power | 30.5 | 24.5 | 28.0 | 37.5 | 27.5 | 37.0 |
| | Standby power | 34.0 | 27.0 | 31.0 | 42.0 | 30.5 | 41.0 |

All ratings data based on operation under ISO 3046 conditions using typical fan sizes and drive ratios. For operation outside of these conditions please consult your Perkins Engines contact. Performance tolerance quoted by Perkins is ±5%.

Electrical ratings assume a power factor of 0.8 and a generator efficiency of 89%.

Rating Definitions

Prime power – Power available at variable load in lieu of main power network. An overload of 10% is permitted for one hour in every twelve hours of operation.
Standby power – Power available at variable load in the event of a main power network failure. No overload is permitted.

Standard Electropak Specification

- Base engine
- Cast iron SAE 3 flywheel housing
- Flywheel
- Rear well aluminium sump
- Mechanical governor – speed control to BS5514 Class A1, ISO 3046-4M3
- Rotary fuel injection pump
- 12V shut off solenoid – energised to run
- Cold start aid
- Spin-on full flow fuel oil filter
- Fuel pre-filter
- Spin-on full flow oil filter
- Thermostat controlled cooling system
- Belt driven water pump
- Fan drive and 15" pusher fan
- Radiator (and piping)
- Fan guards
- Front engine mountings
- 12V engine alternator
- 12V starter motor
- Air filter
- Oil pressure switch
- Coolant temperature switch

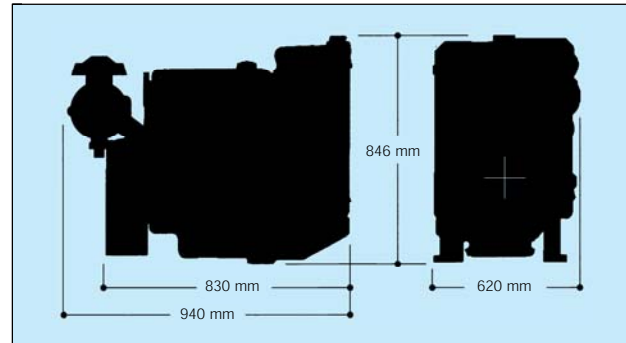
Optional Equipment

- 24V alternator
- 24V starter motor
- Water temperature gauge and sender
- Heater/starter switch
- Rear engine mountings
- Workshop manual
- Parts book
- User handbook

Electropak General Data

| | |
|--|----------------------------------|
| Number of cylinders | 3 |
| Cylinder arrangement | Vertical, in-line |
| Cycle | 4-stroke |
| Induction system | Naturally aspirated |
| Combustion system | Direct injection |
| Cooling system | Water-cooled |
| Displacement | 2.5 litres |
| Bore and stroke | 91.4 mm x 127.0 mm |
| Compression ratio | 16.5:1 |
| Direction of rotation | Clockwise, viewed from the front |
| Firing order | 1,2,3 |
| Total lubrication system capacity | 6.17 litres |
| Coolant capacity (inc radiator) | 11.85 litres |
| Total weight (dry) | 311 kg |
| Total weight (wet) | 328 kg |
| Length | 940 mm |
| Width | 620 mm |
| Height | 846 mm |

| Fuel consumption litres/hour (UK gallons/hour) | | |
|--|--------------|--------------|
| Power rating % | 1500 rev/min | 1800 rev/min |
| 110 | 8.2 (1.8) | 9.6 (2.1) |
| 100 | 6.9 (1.5) | 8.3 (1.8) |
| 75 | 5.1 (1.1) | 6.2 (1.3) |
| 50 | 3.5 (0.7) | 4.5 (1.0) |



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All information in this document is substantially correct at the time of printing but may be altered subsequently by the company.

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