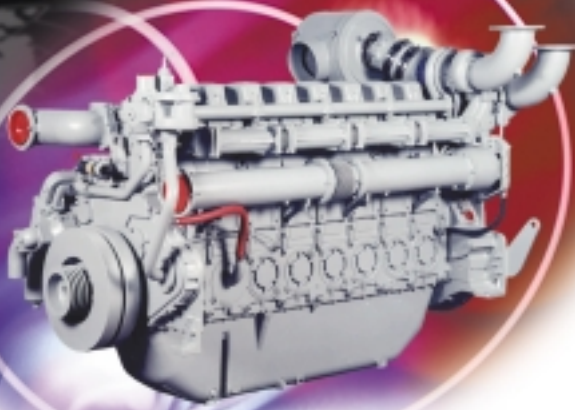




## 4000 Series

### Diesel Engine - Electro Unit 4008TAG

**787 kWm 1500 rev/min**  
**776 kWm 1800 rev/min**



The Perkins 4000 Series family of 8, 12 and 16 cylinder diesel engines was designed in advance of today's uncompromising demands within the power generation industry and includes superior performance and reliability.

The 4008TAG is a turbocharged, air to air charge-cooled 8 cylinder in-line diesel engine. Its premium design and specification features provide economic and durable operation as well as exceptional power to weight ratio, improved serviceability, low gaseous emissions, overall performance and reliability essential to the power generation market.

#### Economic power

Individual 4 valve cylinder heads give optimised gas flows, while unit fuel injectors ensure ultra fine fuel atomisation and hence controlled rapid combustion for efficiency and economy.

Commonality of components with other engines in 4000 Series family allows reduced parts stocking levels.

#### Reliable power

Developed and tested using latest engineering techniques.

Piston temperatures are controlled by an advanced gallery jet cooling system.

All engines are tolerant of a wide range of temperatures without derate.

Service is provided through the extensive Perkins network of over 4000 distributors and dealers worldwide.

#### Clean, efficient power

Exceptional power to weight ratio and compact size for easier transportation and installation.

Designed to provide excellent service access for ease of maintenance.

Engines designed to comply with major international standards.

Low gaseous emissions for cleaner operation.

Engine Speed rev/min	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1500	Baseload Power	672	538	595	798	566	759
	Prime Power	849	679	744	998	715	959
	Standby (maximum)	935	748	816	1094	787	1055
1800	Baseload Power	660	528	594	796	556	745
	Prime Power	836	669	742	995	704	944
	Standby (maximum)	921	737	814	1091	776	1041

The above ratings represent the engine performance capabilities guaranteed within plus or minus 3% at the reference conditions equivalent to those specified in ISO 8528/1, ISO 3046/1, BS 5514/1.

**Ratings conditions:** 25°C air inlet temperature, barometer pressure 100kPa, relative humidity 30%. Please consult your distributor or the factory for ratings in ambient conditions.

*Note:* For full ratings please refer to Perkins Engines Company Limited. All electrical ratings are based on an average alternator efficiency and a power factor of 0.8.

**Fuel specification:** BS 2869 Class A1 + A2 or ASTM D975 No 2D.

#### Rating Definitions

**Baseload Power** - Power available for continuous full load operation. No overload is permitted.

**Prime Power** - Power available for variable load with an average load factor not exceeding 80% of the prime power rating in any 24 hour period. Overload of 10% 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 for a maximum of 500 hours per year. No overload is permitted.

# 4000 Series 4008TAG

## Standard Electro Unit Specification

### Air Inlet

Mounted air filters and turbochargers

### Fuel System

Unit fuel injectors with lift pump and hand stop control  
Electronic governor to ISO 3046 Part 4 class A1  
Full-flow spin-on fuel oil filters

### Lubrication System

Wet sump with filler and dipstick  
Full-flow spin-on oil filters  
Engine jacket water/lub oil temperature stabiliser

### Cooling System

Gear driven circulating pump  
Twin thermostats  
Crankshaft pulley for fan drive

### Electrical Equipment

24 volt starter motor and 24 volt/40 amp alternator with integral regulator and DC output  
24 volt combined high coolant temperature/low oil pressure switch  
Overspeed switch and magnetic pickup  
Turbine inlet temperature shutdown switch  
24 volt stop solenoid (energised to run)

### Flywheel and Housing

Flywheel to SAE J620 size 18  
SAE 0 flywheel housing

## Optional Equipment

The following optional extras equipment is available to make up the specifications to Perkins ElectropaK specification:

Tropical radiator including: Water pipes, clips and hoses  
Fan, fan guards and belts

#### Other optional extra equipment available

Twin heavy duty air cleaner – paper element with pre-cleaner  
Changeover lubricating oil filter  
Changeover fuel oil filter  
Immersion heater with thermostat  
Water pipes, clips and hoses for radiator  
Air starters  
Instrument panel

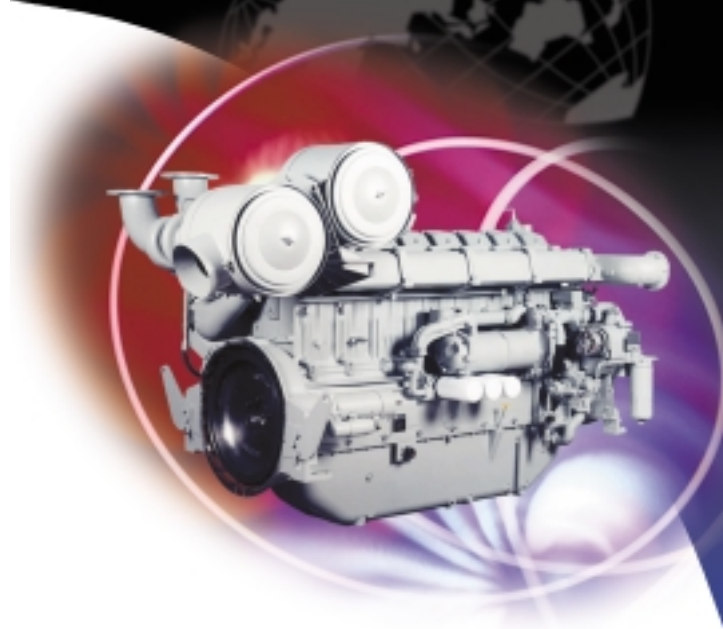
**NB This list is not exhaustive, further options may be available to meet to particular applications on enquiry to Perkins Sales Department**



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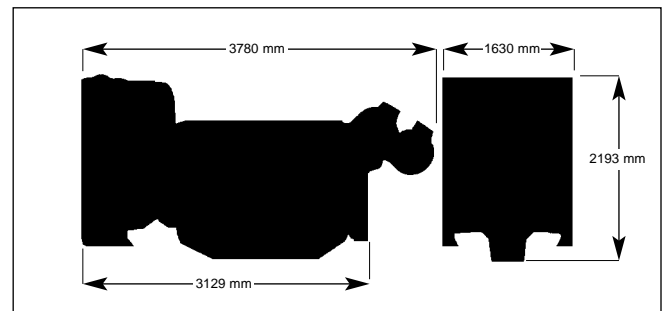
All information given in this leaflet is correct at the time of printing but it may be changed subsequently by the Company



## General Data

<b>Number of cylinders</b>	8	
<b>Cylinder arrangement</b>	Vertical, in-line	
<b>Cycle</b>	4-stroke	
<b>Induction system</b>	Turbocharged Air to air charge cooled	
<b>Combustion system</b>	Direct injection	
<b>Cooling system</b>	Water-cooled	
<b>Displacement</b>	30.561 litres	
<b>Bore and stroke</b>	160mm x 190 mm	
<b>Compression ratio</b>	13.6:1	
<b>Direction of rotation</b>	Anti-clockwise, viewed from flywheel end	
<b>Firing order</b>	1, 4, 7, 6, 8, 5, 2, 3	
<b>Total lubrication System capacity</b>	165.6 litres	
	<b>Electro Unit</b>	<b>ElectropaK</b>
<b>Total coolant capacity</b>	48 litres	162 litres
<b>Total weight (dry)</b>	3120 kg	3730 kg
<b>Length</b>	2855 mm	3780 mm
<b>Width</b>	1585 mm	1630 mm
<b>Height</b>	1775 mm	2193 mm

Fuel Consumption g/kWh		
Engine speed	1500 rev/min	1800 rev/min
At Standby Maximum rating	207	213
At Prime Power rating	202	212
At Baseload rating	199	205
At 75% of Prime Power rating	196	203
At 50% of Prime Power rating	202	210
At 25% of Prime Power rating	218	220



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